Lake Calumet Cluster Site

Data Usability Summary Report

Chicago, IL

Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs), Pesticides, Polychlorinated Biphenyls, Metals, and Miscellaneous General Chemistry Analyses

SDG #s: 500-110798, 500-110872, and 500-110948

Analyses Performed By:
TestAmerica Laboratories
Chicago, IL

Report #: 25711R
Review Level: Tier III
Project: CI001805.0003.00001

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Groups (SDGs) # 500-110798, 500-110872, and 500-110948 for samples collected in association with the Lake Calumet Cluster Site in Chicago, Illinois. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data as reported by the laboratory were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	Pest PCBs	Metals	Misc
500-110798	MW-3-GW-04272016	500-110798-1	Water	4/27/2016		X	X	X	X	X
	MW-4-GW-04272016	500-110798-2	Water	4/27/2016		X	X	X	X	X
	MW-5-GW-04272016	500-110798-3	Water	4/27/2016		X	X	X	X	X
500-110872	MW-1-GW-04282016	500-110872-1	Water	4/28/2016		X	X	X	X	X
	MW-13-GW-04282016	500-110872-2	Water	4/28/2016		X	X	X	X	X
	MW-12-GW-04282016	500-110872-3	Water	4/28/2016		X	X	X	X	X
	MW-11-GW-04282016	500-110872-4	Water	4/28/2016		X	X	X	X	X
	DUP-1(04282016)	500-110872-5	Water	4/28/2016	MW-13-GW	X	X	X	X	X
500-110948	MW-2-GW-04282016	500-110948-1	Water	4/28/2016		X	X	X	X	X
	MW-10-GW-04292016	500-110948-2	Water	4/29/2016		X	X	X	X	X
	MW-6-GW-04292016	500-110948-3	Water	4/29/2016		X	X	X	X	X
	MW-7-GW-04292016	500-110948-4	Water	4/29/2016		X	X	X	X	X
	MW-9-GW-04292016	500-110948-5	Water	4/29/2016		X	X	X	X	X
	MW-8-GW-04292016	500-110948-6	Water	4/29/2016		X	X	X	X	X
	DUP-2 (04292016)	500-110948-7	Water	4/29/2016	MW-6-GW	X	X	X	X	X

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 8081B, 8082A, 8260B, and 8270D. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected as unusable. The compound may or may not be present in the sample.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES INCLUDING TOTAL VOLATILE PETROLEUM HYDROCARBONS (TPHG)

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260B	Water	14 days from collection to analysis	Cool to < 6 °C; pH < 2 with HCl

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks, trip blanks, and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure sample storage contamination. Rinse blanks also measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a compound detected in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Target compounds were not detected above the MDL in the associated blanks; therefore detected sample results are not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration (ICV)

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99, and a RRF value greater than control limit (0.05).

4.2 Continuing Calibration (CCV)

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Location	Initial / Continuing	Compound	Criteria
SDG 500-110798 MW-3-GW-04272016 MW-4-GW-04272016 MW-5-GW-04272016	CCV %D	2-Butanone (MEK)	-21.8 %
		4-Methyl-2-Pentanone (MIBK)	-24.2 %
		Carbon Tetrachloride	+28.3 %
		Methyl acetate	-21.4 %
		Methyl N-Butyl Ketone (2-Hexanone)	-21.9 %
		Trichlorofluoromethane (CFC-11)	+28.8 %
SDG 500-110872 MW-1-GW-04282016 MW-13-GW-04282016 MW-12-GW-04282016 MW-11-GW-04282016 DUP-1(04282016)	CCV %D	Bromomethane	-38.8 %
SDG 500-110948 MW-2-GW-04282016	CCV %D	1,2-Dibromo-3-chloropropane (DBCP)	-29.5 %
		2-Butanone (MEK)	-22.7 %
		4-Methyl-2-Pentanone (MIBK)	-26.8 %
		Bromoform	-21.4 %
		Dichlorodifluoromethane (CFC-12)	-22.1 %
		Chlorodibromomethane	-20.3 %
		Chloromethane	-21.8 %
		Methyl N-Butyl Ketone (2-Hexanone)	-24.1 %
SDG 500-110948 MW-10-GW-04292016 MW-6-GW-04292016 MW-7-GW-04292016 MW-9-GW-04292016 MW-8-GW-04292016 DUP-2 (04292016)	CCV %D	1,2-Dibromo-3-chloropropane (DBCP)	-23.3 %
		2-Butanone (MEK)	-21.1 %
		4-Methyl-2-Pentanone (MIBK)	-20.2 %
		Bromoform	-22.1 %
		Methyl N-Butyl Ketone (2-Hexanone)	-22.0 %

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF < 0.05	Non-detect	R
		Detect	J
	RRF < 0.01[1]	Non-detect	R
		Detect	J
	RRF > 0.05 or RRF > 0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient < 0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D > +20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D < -20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

[1] RRF of 0.01 only applies to typically poor responding compounds (e.g. ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits are presented in the following table.

Sample Location	Surrogate	Recovery
SDG 500-110872 MW-1-GW-04282016	Dibromofluoromethane	< LL but > 10%
	1,2-Dichloroethane-d_4 Toluene-d_8 4-Bromofluorobenzene	Acceptable

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL (Upper Control Limit)	Non-detect	No Action
	Detect	J
< LL (Lower Control Limit) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

Control Limit	Sample Result	Qualification
D - Surrogates diluted below the calibration curve	Non-detect	UJ[1]
	Detect	J[1]

[1] A more concentrated analysis was not performed with surrogate compounds within the calibration range; therefore, no determination of extraction efficiency could be made.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC analysis exhibit area counts that are within a factor of two (i.e. 50% - 200%) of the area counts of the associated continuing calibration standard.

All internal standard area counts were within the control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The spiked compounds used in the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD results must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSDs performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD spiking concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

Sample locations MW-3-GW-04272016, MW-2-GW-04282016, and MW-8-GW-04292016 were used in the MS/MSD analyses. Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Location	Compound	MS Recovery	MSD Recovery
SDG 500-110798 MW-3-GW-04272016	Trichlorofluoromethane (CFC-11)	> UL	Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

Control Limit	Sample Result	Qualification
Parent sample concentration > 4x the MS/MSD spike concentration.	Detect	No Action
	Non-detect	

Sample locations associated with MS/MSDs exhibiting RPDs greater than the control limit are presented in the following table.

Sample Location	Compounds
SDG 500-110948 MW-8-GW-04292016	Bromomethane Dichlorodifluoromethane (CFC-12) Chloroethane Chloromethane Methyl-tert-butylether (MTBE) Trichlorofluoromethane (CFC-11) Vinyl chloride

The criteria used to evaluate the RPD between the MS and MSD are presented in the following table. In the case of RPD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The spiked compounds used in the LCS analysis must exhibit recoveries within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL for water matrices is applied to the difference between the results.

Results for the field duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SDG 500-110872 MW-13-GW-04282016 / DUP-1(04282016)	Ethylbenzene	2500	1900	27.3 %
	Styrene (Monomer)	10 U	120	NC
	Toluene	8100	4600	55.1 %

Sample ID / Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SDG 500-110872 MW-13-GW-04282016 / DUP-1(04282016)	Total Xylenes	17000	14000	19.4 %
	cis-1,2-Dichloroethene	54	26	70.0 %
	Acetone	85	50 U	AC
	Benzene	630	450	33.3 %
	Vinyl chloride	15	7.1	AC
	1,1-Dichloroethane	52	23	77.3 %
	2-Butanone (MEK)	60	50 U	AC
	1,2-Dichlorobenzene	17	14	19.4 %
	Isopropylbenzene	97	110	12.6 %
SDG 500-110948 MW-6-GW-04292016 / DUP-2 (04292016)	Ethylbenzene	100	97	3.0 %
	1,4-Dichlorobenzene	13	13	0.0 %
	1,2-Dichloroethane	1.4	1.4	0.0 %
	4-Methyl-2-Pentanone	27	27	0.0 %
	Methylcyclohexane	1.1	1.1	0.0 %
	Toluene	160	150	6.5 %
	Total Xylenes	380	440	14.6 %
	cis-1,2-Dichloroethene	4.7	4.5	4.3 %
	Acetone	33	30	9.5 %
	Benzene	7.0	7.0	0.0 %
	Vinyl chloride	4.1	3.7	10.3 %
	1,1-Dichloroethane	0.51 J	1.0 U	AC
	2-Butanone (MEK)	14	13	7.4 %
	1,2-Dichlorobenzene	2.4	2.5	4.1 %
	Isopropylbenzene	6.7	6.6	1.5 %

The styrene, 1,1-dichloroethane, cis-1,2-dichloroethene, and toluene results for field duplicate samples MW-13-GW-04282016 and DUP-1(04282016) exhibited RPDs greater than the control limit. The styrene, 1,1-dichloroethane, cis-1,2-dichloroethene, and toluene results for MW-13-GW-04282016 and DUP-1(04282016) were therefore qualified as estimated.

10. Compound Identification

A positive identification of a target compound is made when the relative retention time (RRT) is within ±0.06 RRT units of the compound's RRT in the associated calibration standard and the mass spectrum of the compound matches the compound's mass spectrum in the associated calibration standard within the method-specified criteria.

All identified compounds met the specified criteria. Sample results associated with compounds that exhibited concentrations greater than the linear range of the instrument calibration or were reported from a dilution analysis are summarized in the following table.

Sample ID	Compound	Original Result	Diluted Result	Reported Result
MW-4-GW-04272016	Benzene	--	250	250 D

Sample ID	Compound	Original Result	Diluted Result	Reported Result
MW-3-GW-04272016	Ethylbenzene	--	42	42 D
	Toluene	--	280	280 D
	Total Xylenes	--	290	290 D
	Benzene	--	490	490 D
MW-13-GW-04282016	1,1-Dichloroethane	--	52	52 D
	1,2-Dichlorobenzene	--	17	17 D
	2-Butanone (MEK)	--	60	60 D
	Acetone	--	85	85 D
	Benzene	--	630	630 D
	cis-1,2-Dichloroethene	--	54	54 D
	Ethylbenzene	--	2500	2500 D
	Isopropylbenzene	--	97	97 D
	Toluene	--	8100	8100 D
	Total Xylenes	--	17000	17000 D
	Vinyl chloride	--	15	15 D
MW-12-GW-04282016	1,1-Dichloroethane	--	3300	3300 D
	1,1-Dichloroethene	--	10	10 D
	2-Butanone (MEK)	--	2700	2700 D
	4-Methyl-2-Pentanone	--	24000	24000 D
	Acetone	--	4800	4800 D
	Benzene	--	160	160 D
	Chloroethane	--	26	26 D
	cis-1,2-Dichloroethene	--	1100	1100 D
	Dichloromethane	--	6300	6300 D
	Ethylbenzene	--	3400	3400 D
	Isopropylbenzene	--	43	43 D
	Tetrachloroethene	--	680	680 D
	Toluene	--	11000	11000 D
	Total Xylenes	--	19000	19000 D
	trans-1,2-Dichloroethene	--	23	23 D
	Trichloroethene	--	720	720 D
	Vinyl chloride	--	420	420 D
MW-11-GW-04282016	Total Xylenes	--	620	620 D
DUP-1(04282016)	1,1-Dichloroethane	--	23	23 D
	1,2-Dichlorobenzene	--	14	14 D
	Benzene	--	450	450 D
	cis-1,2-Dichloroethene	--	26	26 D

Sample ID	Compound	Original Result	Diluted Result	Reported Result
DUP-1(04282016)	Ethylbenzene	--	1900	1900 D
	Isopropylbenzene	--	110	110 D
	Styrene (Monomer)	--	120	120 D
	Toluene	--	4600	4600 D
	Total Xylenes	--	14000	14000 D
	Vinyl chloride	--	7.1	7.1 D
MW-2-GW-04282016	Chlorobenzene	--	660	660 D
MW-6-GW-04292016	Total Xylenes	--	380	380 D
MW-7-GW-04292016	Toluene	--	410	410 D
	Total Xylenes	--	760	760 D
DUP-2 (04292016)	Total Xylenes	--	440	440 D

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result < the calibration range	DJ
Diluted sample result > the calibration range	EDJ
Original sample result > the calibration range	EJ

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks					X
C. Trip blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision RPD		X	X		
Field/Laboratory Duplicate Sample RPD		X	X		
Surrogate Spike %R		X	X		
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Quantitation transcriptions/calculations		X		X	
E. Reporting limits adjusted for sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270D	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to < 6 °C

All samples were extracted and analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Target compounds were not detected above the MDL in the associated blanks; therefore detected sample results are not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution are acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration Verification (ICV)

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration Verification (CCV)

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Location	Initial/Continuing	Compound	Criteria
SDG 500-110798 MW-3-GW-04272016 MW-4-GW-04272016 MW-5-GW-04272016	ICV %RSD	Benzaldehyde	28.9 %
	CCV %D	2,2-Oxybis(1-Chloropropane)	+24.0 %
		2-Methyl-4,6-dinitrophenol	+21.1 %
		2-Nitroaniline	+26.0 %
		4-Chloroaniline	+25.2 %
		Carbazole	+26.8 %
		Hexachlorocyclopentadiene	-54.1 %
		Indeno(1,2,3-cd)pyrene	+41.6 %
SDG 500-110872 MW-11-GW-04282016 DUP-1(04282016)	ICV %RSD	Benzaldehyde	41.4 %
	ICV %D	4-Chloroaniline	-62.9 %
	CCV %D	2,2-Oxybis(1-Chloropropane)	-22.1 %
		3-Nitroaniline	+38.1 %
		4-Nitroaniline	+23.8 %
		Benzaldehyde	+38.6 %
		Carbazole	+32.2 %
		Hexachlorocyclopentadiene	-58.3 %
SDG 500-110872 MW-1-GW-04282016 MW-13-GW-04282016 MW-12-GW-04282016	ICV %RSD	Benzaldehyde	52.1 %
		Hexachlorocyclopentadiene	34.7 %
	ICV %D	4-Chloroaniline	-47.7 %
		3-Nitroaniline	-32.7 %
	CCV %D	2,4-Dinitrophenol	+20.5 %
		4-Nitroaniline	+41.0 %
		Benzaldehyde	+38.0 %
		Hexachlorocyclopentadiene	+41.3 %
		Pentachlorophenol	+29.7 %
SDG 500-110948 MW-9-GW-04292016	ICV %RSD	Benzaldehyde	48.4%
	CCV %D	4-Chloroaniline	+22.2 %

Sample Location	Initial/Continuing	Compound	Criteria
SDG 500-110948 MW-2-GW-04282016 MW-10-GW-04292016 MW-6-GW-04292016 MW-7-GW-04292016 MW-8-GW-04292016 DUP-2 (04292016)	CCV %D	2,2-Oxybis(1-Chloropropane)	+24.9 %
		Benzaldehyde	-95.8 %
		Dibenzo(a,h)anthracene	+22.0 %
		Indeno(1,2,3-cd)pyrene	+24.1 %

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF < 0.05	Non-detect	R
		Detect	J
	RRF < 0.01[1]	Non-detect	R
		Detect	J
	RRF > 0.05 or RRF > 0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 20% or a correlation coefficient < 0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D > 20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D > 20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J
	%D > 90% (increase or decrease in sensitivity)	Non-detect	R
		Detect	J

[1] RRF of 0.01 only applies to typically poor responding compounds (e.g. anilines, nitrophenols, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits, and that all SVOC surrogate recoveries be greater than ten percent.

Sample locations associated with surrogates that exhibited recoveries outside of the control limits are presented in the following table.

Sample Location	Surrogate	Recovery
SDG 500-110872 MW-12-GW-04282016	All surrogates	D (diluted out)

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of surrogate deviations, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	No Action
	Detect	J
< LL but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
D - Surrogates diluted below the calibration curve	Non-detect	UJ[1]
	Detect	J[1]

[1] A more concentrated analysis was not performed with surrogate compounds within the calibration range; therefore, no determination of extraction efficiency could be made.

6. Internal Standard Performance

The internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC analysis exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

Sample locations associated with internal standards exhibiting responses outside of the control limits are presented in the following table.

Sample Location	Internal Standard	Response
SDG 500-110798 MW-4-GW-04272016	1,4-Dichlorobenzene-d_4 Naphthalene-d_8 Acenaphthene-d_{10} Phenanthrene-d_{10} Chrysene-d_{12}	Acceptable
	Perylene-d_{12}	< LL but > 25%

The criteria used to evaluate the internal standard responses are presented in the following table. In the case of an internal standard deviation, the compounds quantitated under the deviant internal standard are qualified as documented in the table below.

Control limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No action
	Detect	J
< the lower control limit (LL) but > 25%	Non-detect	UJ
	Detect	J

Control limit	Sample Result	Qualification
< 25%	Non-detect	R
	Detect	J

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD results must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified and the laboratory qualifier will be removed. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

The MS/MSD analysis was not performed on a sample location from within these SDGs.

8. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit recoveries and relative percent differences (RPDs) between the LCS and LCSD results within the laboratory-established acceptance limits.

Sample locations associated with LCS/LCSD analyses exhibiting recoveries outside of the control limits are presented in the following table.

Sample Location	Compound	LCS Recovery	LCSD Recovery
SDG 500-110798 MW-3-GW-04272016 MW-4-GW-04272016 MW-5-GW-04272016	Hexachloroethane Hexachloro-1,3-butadiene	< LL but > 10 %	< LL but > 10 %
	Hexachlorocyclopentadiene	< 10 %	< 10 %
SDG 500-110948 MW-2-GW-04282016 MW-10-GW-04292016 MW-6-GW-04292016 MW-7-GW-04292016 MW-9-GW-04292016 MW-8-GW-04292016 DUP-2 (04292016)	Benzaldehyde	> UL	> UL

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of any LCS deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

Sample locations associated with LCS/LCSDs exhibiting RPDs greater than the control limit are presented in the following table.

Sample Location	Compound
SDG 500-110948 MW-2-GW-04282016 MW-10-GW-04292016 MW-6-GW-04292016 MW-7-GW-04292016 MW-9-GW-04292016 MW-8-GW-04292016 DUP-2 (04292016)	2,4-Dimethylphenol 4-Chloroaniline

The criteria used to evaluate the RPD between the LCS and LCSD are presented in the following table. In the case of RPD deviations, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

9. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL for water matrices is applied to the difference between the results.

Results for the field duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SDG 500-110872 MW-13-GW-04282016 / DUP-1(04282016)	2,4-Dimethylphenol	37 J	40 J	7.8 %
	4-Methylphenol	210	280	28.6 %
	Phenol	56	84	40.0 %
	Acenaphthylene	4.5	5.1 J	12.5 %
	Isophorone	5.4 J	16 U	AC

Sample ID / Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SDG 500-110872 MW-13-GW-04282016 / DUP-1(04282016)	Acenaphthene	1.4 J	8.1 U	AC
	Diethyl phthalate	33	31	6.3 %
	Di-n-butyl phthalate	5.5 J	40 U	AC
	N-nitrosodiphenylamine	14	15	6.9 %
	Fluorene	1.8 J	8.1 U	AC
	Pentachlorophenol	65 J	160 U	AC
	Naphthalene	250	260	3.9 %
	2-Methylnaphthalene	22	20	9.5 %
	1,1-Biphenyl	3.1 J	3.2 J	3.2 %
	2-Methylphenol	8.1 U	14 J	AC
SDG 500-110948 MW-6-GW-04292016 / DUP-2 (04292016)	2,4-Dimethylphenol	110	110	0.0 %
	4-Methylphenol	96	90	6.5 %
	Phenol	40 J	38 J	5.1 %
	bis(2-Ethylhexyl)phthalate	85 J	88	3.5 %
	Naphthalene	16	16	0.0 %
	2-Methylnaphthalene	4.3 U	6.6	AC
	2-Methylphenol	20	19	5.1 %

AC Acceptable
J Estimated (result is < RL)
U Not detected

The phenol results for field duplicate samples MW-13-GW-04282016 and DUP-1(04282016) exhibited a RPD greater than the control limit. The phenol results for MW-13-GW-04282016 and DUP-1(04282016) have been qualified as estimated.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria. Sample results associated with compounds that exhibited concentrations greater than the linear range of the instrument calibration or were reported from a dilution analysis are summarized in the following table.

Sample ID	Compound	Original Result	Diluted Result	Reported Result
MW-3-GW-04272016	1,1-Biphenyl	--	38	38 D
	2,4-Dimethylphenol	--	280	280 D
	2-Methylnaphthalene	--	360	360 D
	2-Methylphenol	--	180	180 D
	4-Methylphenol	--	280	280 D
	Acenaphthene	--	29	29 D
	Acenaphthylene	--	3.7 J	3.7 JD
	Anthracene	--	12	12 D

Sample ID	Compound	Original Result	Diluted Result	Reported Result
MW-3-GW-04272016	Carbazole	--	140	140 D
	Dibenzofuran	--	56	56 D
	Fluoranthene	--	7.1	7.1 D
	Fluorene	--	83	83 D
	Naphthalene	--	3600	3600 D
	Phenanthrene	--	69	69 D
	Phenol	--	85	85 D
	Pyrene	--	4.7	4.7 D
MW-1-GW-04282016	Naphthalene	150 E	--	150 EJ
MW-13-GW-04282016	1,1-Biphenyl	--	3.1 J	3.1 JD
	2,4-Dimethylphenol	--	37 J	37 JD
	2-Methylnaphthalene	--	22	22 D
	4-Methylphenol	--	210	210 D
	Acenaphthene	--	1.4 J	1.4 JD
	Acenaphthylene	--	4.5	4.5 D
	Diethyl phthalate	--	33	33 D
	Di-n-butyl phthalate	--	5.5 J	5.5 JD
	Fluorene	--	1.8 J	1.8 JD
	Isophorone	--	5.4 J	5.4 JD
	Naphthalene	--	250	250 D
	N-nitrosodiphenylamine	--	14	14 D
	Pentachlorophenol	--	65 J	65 JD
	Phenol	--	56	56 D
MW-12-GW-04282016	2-Methylnaphthalene	--	46	46 D
	2-Methylphenol	--	7600	7600 D
	4-Methylphenol	--	510000	510000 D
	Isophorone	--	19000	19000 D
	Naphthalene	--	160	160 D
	Pentachlorophenol	--	1200 J	1200 JD
	Phenol	--	4000	4000 D
MW-11-GW-04282016	1,1-Biphenyl	--	19 J	19 JD
	2,4-Dimethylphenol	--	16 J	16 JD
	2-Methylnaphthalene	--	2.9 J	2.9 JD
	4-Methylphenol	--	180	180 D
	bis(2-Chloroethoxy)methane	--	3.8 J	3.8 JD
	Naphthalene	--	8.0	8.0 D
	Phenol	--	31 J	31 JD

Sample ID	Compound	Original Result	Diluted Result	Reported Result
DUP-1(04282016)	1,1-Biphenyl	--	3.2 J	3.2 JD
	2,4-Dimethylphenol	--	40 J	40 JD
	2-Methylnaphthalene	--	20	20 D
	2-Methylphenol	--	14 J	14 JD
	4-Methylphenol	--	280	280 D
	Acenaphthylene	--	5.1 J	5.1 JD
	Diethyl phthalate	--	31	31 D
	Naphthalene	--	260	260 D
	N-nitrosodiphenylamine	--	15	15 D
	Phenol	--	84	84 D
MW-2-GW-04282016	2-Methylnaphthalene	--	120	120 D
	Naphthalene	--	90	90 D
MW-6-GW-04292016	2,4-Dimethylphenol	--	110	110 D
	2-Methylphenol	--	20	20 D
	4-Methylphenol	--	96	96 D
	bis(2-Ethylhexyl)phthalate	--	85 J	85 JD
	Naphthalene	--	16	16 D
	Phenol	--	40 J	40 JD
MW-7-GW-04292016	2,4-Dimethylphenol	--	470	470 D
	2-Methylnaphthalene	--	9.4	9.4 D
	2-Methylphenol	--	78	78 D
	4-Methylphenol	--	280	280 D
	Anthracene	--	2.8 J	2.8 JD
	bis(2-Ethylhexyl)phthalate	--	290	290 D
	Carbazole	--	4.8 J	4.8 JD
	Fluoranthene	--	8.8	8.8 D
	Fluorene	--	3.2 J	3.2 JD
	Naphthalene	--	48	48 D
	Phenanthrene	--	14	14 D
	Pyrene	--	8.0 J	8.0 JD
DUP-2 (04292016)	2,4-Dimethylphenol	--	110	110 D
	2-Methylnaphthalene	--	6.6	6.6 D
	2-Methylphenol	--	19	19 D
	4-Methylphenol	--	90	90 D
	bis(2-Ethylhexyl)phthalate	--	88	88 D
	Naphthalene	--	16	16 D
	Phenol	--	38 J	38 JD

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result < the calibration range	DJ
Diluted sample result > the calibration range	EDJ
Original sample result > the calibration range	EJ

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270D	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding Times		X		X	
Reporting Limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X	X		
Laboratory Control Sample Duplicate (LCSD) %R		X	X		
LCS/LCSD Precision (RPD)		X	X		
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD RPD	X				X
Field Duplicate Sample RPD		X		X	
Surrogate Spike %R		X	X		
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System Performance and Column Resolution		X		X	
Initial Calibration %RSDs		X	X		
Continuing Calibration RRFs		X		X	
Continuing Calibration %Ds		X	X		
Instrument Tune and Performance Check		X		X	
Ion Abundance Criteria for Each Instrument Used		X		X	
Internal Standards		X	X		
Compound Identification and Quantitation					
A. Reconstructed Ion Chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of Sample Compounds Within the Established RT Windows		X		X	
D. Quantitation transcriptions/calculations		X		X	
E. Reporting Limits Adjusted for Sample Dilutions		X	X		

%R Percent Recovery
RPD Relative Percent Difference
%RSD Relative Standard Deviation
%D Percent Difference

PESTICIDES ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8081B	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to < 6 °C

All samples were extracted and analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Target compounds were not detected above the MDL in the associated blanks; therefore detected sample results are not associated with blank contamination.

3. System Performance

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration Verification (ICV)

All target analytes associated with the initial calibration standards must exhibit a relative standard deviation (RSD) less than the method-specified control limit of 20% or a correlation coefficient greater than 0.99.

4.2 Continuing Calibration Verification (CCV)

All target analytes associated with the continuing calibration standard must exhibit a percent difference (%D) less than the method-specified control limit of 15%.

All calibration criteria were within the control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. The analysis requires surrogate compounds exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Location	Surrogate	Recovery
SDG 500-110948 MW-7-GW-04292016	Tetrachloro-m-xylene (TCMX)	Acceptable (93%)
	Decachlorobiphenyl (DCB)	< 10%
SDG 500-110872 DUP-1(04282016)	Tetrachloro-m-xylene (TCMX)	> UL
	Decachlorobiphenyl (DCB)	< LL but > 10%

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
One surrogate exhibiting recovery outside the control limits but > 10%	Non-detect	No Action
	Detect	
Surrogates diluted (D) below the calibration curve	Non-detect	J[1]
	Detect	

[1] A more concentrated analysis was not performed with surrogate compounds within the calibration range; therefore, no determination of extraction efficiency could be made.

6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis was not performed on a sample location from within these SDGs.

7. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The spiked compounds used in the LCS/LCSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the LCS and LCSD results must be within the laboratory-established acceptance limits.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits.

8. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL for water matrices is applied to the difference between the results.

Results for the field duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
SDG 500-110872 MW-13-GW-04282016 / DUP-1(04282016)	All analytes	U	U	AC
SDG 500-110948 MW-6-GW-04292016 / DUP-2 (04292016)	All analytes	U	U	AC

AC Acceptable
U Not detected

The field duplicate samples exhibited acceptable results.

9. Analyte Identification

The retention times of all quantitated peaks must fall within the calculated retention time windows for both the primary and confirmation columns. When dual column analysis is performed the percent difference (%D) between the detected analyte results calculated on each column must be less than 40%.

All sample results exhibited acceptable %Ds between the primary and confirmation columns.

10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR PESTICIDES

Pesticides: SW-846 8081B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY (GC/ECD)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD RPD	X				X
Laboratory Duplicate Sample RPD	X				X
Field Duplicate Sample RPD		X		X	
Surrogate Spike %R		X	X		
Column %D $\leq$ 40% (If dual column is performed for reporting-not confirmation)		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
Initial calibration %RSDs		X		X	
Continuing calibration %Ds		X		X	
System performance and column resolution		X		X	
Analyte identification and quantitation					
A. Quantitation Reports		X		X	
B. RT of sample analytes within the established RT windows		X		X	
C. Identification/Confirmation		X		X	
D. Quantitation transcriptions/calculations		X		X	
E. Reporting limits adjusted for sample dilutions		X		X	

%R Percent recovery
%RSD Relative standard deviation
RPD Relative percent difference
%D Percent difference

POLYCHLORINATED BIPHENYLS (PCBs) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8082A	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to < 6 °C

All samples were extracted and analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Target compounds were not detected above the MDL in the associated blanks; therefore detected sample results are not associated with blank contamination.

3. System Performance

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

All target analytes associated with the initial calibration standards must exhibit a relative standard deviation (RSD) less than the method-specified control limit of 20% or a correlation coefficient greater than 0.99. Multiple-point calibrations were performed for Aroclor 1016 and 1260 only. Single-point calibrations were performed for the remaining Aroclors.

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (15%).

All calibration criteria were within the control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. The analysis requires surrogate compounds exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Location	Surrogate	Recovery
SDG 500-110948 MW-7-GW-04292016	Tetrachloro-m-xylene (TCMX) Decachlorobiphenyl (DCB)	< LL but > 10%
MW-7-GW-04292016 (re-extraction)	Tetrachloro-m-xylene (TCMX) Decachlorobiphenyl (DCB)	< 10%

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below. The initial analytical results for MW-7-GW-04292016 were retained in preference to the re-extraction results.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
One surrogate exhibiting recovery outside the control limits but > 10%	Non-detect	No Action
	Detect	
Surrogates diluted below the calibration curve	Non-detect	J[1]
	Detect	

[1] A more concentrated analysis was not performed with surrogate compounds within the calibration range; therefore, no determination of extraction efficiency could be made.

6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis was not performed on a sample location within these SDGs.

7. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The spiked compounds used in the LCS/LCSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the LCS and LCSD results must be within the laboratory-established acceptance limits.

All compounds associated with the LCS analyses exhibited recoveries within the control limits.

8. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the overall precision of the field sampling procedures and analytical method. The QAPP-specified control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices.

The field duplicate sample analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL for water matrices is applied to the difference between the results.

Results for the field duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
SDG 500-110872 MW-13-GW-04282016 / DUP-1(04282016)	All analytes	U	U	AC
SDG 500-110948 MW-6-GW-04292016 / DUP-2 (04292016)	Aroclor 1232	6.5	5.7	13.1 %

AC Acceptable
U Not detected

The field duplicate samples exhibited acceptable results.

9. Analyte Identification

The retention times of all quantitated peaks must fall within the calculated retention time windows for both the primary and confirmation columns. When dual column analysis is performed the RPD between the detected analyte results calculated from each column must be less than 40%. For analytes that are identified, the lower of the concentration values obtained from each column is reported.

All sample results exhibited acceptable RPDs between the primary and confirmation columns.

10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR PCBs

PCBs: SW-846 8082A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY (GC/ECD)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks					X
Laboratory Control Sample (LCS) Accuracy %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD RPD	X				X
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X	X		
Column (%D) (If dual column is performed-not confirmation purposes only)		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
Initial calibration %RSDs		X		X	
Continuing calibration %Ds		X		X	
System performance and column resolution		X		X	
Compound identification and quantitation					
A. Quantitation Reports		X		X	
B. RT of sample compounds within the established RT windows		X		X	
C. Identification/Confirmation		X		X	
D. Quantitation transcriptions/calculations		X		X	
E. Reporting limits adjusted for sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6010C, 7470A, 9034, 9038, and 9060, USEPA Method 353.2, and Standard Methods (SM) 2540D, 4500-NH3-G, 4500-NO2-B, and 4500-NO3-F. Data were reviewed in accordance with USEPA National Functional Guidelines of October 2004.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

    U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

    B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

    E The reported value is estimated due to the presence of interference.

    N Spiked sample recovery is not within the control limits.

    * Duplicate analysis is not within the control limits.

- Validation Qualifiers

    J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

    UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

    UB Analyte considered non-detect at the listed value due to associated blank contamination.

    R The sample results are rejected as unusable. The analyte may or may not be present in the sample.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010C	Water	180 days from collection to analysis	Cool to < 6 °C; pH < 2 with HNO_3
SW-846 7470A	Water	28 days from collection to analysis	Cool to < 6 °C; pH < 2 with HNO_3

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks also measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected analyte in an associated blank (common laboratory contaminant analytes are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All analytes associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the analytes listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Location	Analyte	Sample Result	Qualification
SDG 500-110948 MW-10-GW-04292016 MW-6-GW-04292016 MW-7-GW-04292016 DUP-2 (04292016)	Total Selenium	Detected sample results < RL and < BAL	"UB" at the RL
SDG 500-110948 MW-6-GW-04292016 MW-7-GW-04292016 MW-8-GW-04292016 DUP-2 (04292016)	Dissolved Selenium		

RL = reporting limit

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of

acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration

The initial calibration must exhibit a correlation coefficient greater than 0.995. A technical review of the data applies limits to all analytes with no exceptions.

3.2 Continuing Calibration

All target analytes associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (10%).

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within the control limits.

All analytes associated with calibration standard recoveries were within the control limits, with the exception of the analytes presented in the following table.

Sample Locations	Initial / Continuing	Analytes	Standard Recovery
SDG 500-110798 MW-3-GW-04272016 MW-4-GW-04272016	CCV	Total Arsenic Dissolved Arsenic	> 110%
SDG 500-110872 MW-1-GW-04282016 MW-13-GW-04282016 MW-11-GW-04282016 DUP-1(04282016)	CCV	Total Aluminum Dissolved Aluminum Total Selenium Dissolved Selenium	> 110%
SDG 500-110872 MW-12-GW-04282016	CCV	Total Aluminum Dissolved Aluminum	> 110%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Analytes	Control Limit	Sample Result	Qualification
All analytes except mercury	75% to 89%	Non-detect	UJ
		Detect	J
	> 110%	Non-detect	No Action
		Detect	J
	< 75%	Non-detect	R
		Detect	J

3.3 Reporting limit (RL) Check Standard

The RL check standard serves to verify the linearity of calibration of the analysis at the RL. The RL standard is not required for the analysis of aluminum (Al), barium (Ba), calcium (Ca), iron (Fe), magnesium (Mg), sodium (Na), and potassium (K). The criteria used to evaluate the RL standard analysis are presented below in the RL standards evaluation table.

All RL standard recoveries were within the control limits.

3.4 ICP Interference Check Standard (ICS)

The ICS verifies the laboratories inter-element and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) and Laboratory Duplicate Sample Analysis

MS/MSD and laboratory duplicate sample data are used to assess the precision and accuracy of the analytical method.

4.1 Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

All metal analytes must exhibit recoveries within the established acceptance limits of 75% to 125%. The relative percent difference (RPD) between the MS and MSD results must be no greater than the established acceptance limit of 20%. The MS/MSD control limits do not apply for MS/MSDs performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD spiking concentration by a factor of four or greater. In instance where this is true, the data will not be qualified and the laboratory qualifier will be removed. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

All analytes associated with the MS/MSD analyses exhibited acceptable recoveries and RPDs between the MS and MSD results.

4.2 Laboratory Duplicate Sample Analysis

The laboratory duplicate sample relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to five times the RL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the RL, a control limit of one times the RL is applied for water matrices and two times the RL for soil matrices.

All analytes associated with the laboratory duplicate sample analyses exhibited RPDs within the control limit.

5. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit recoveries between the control limits of 80% and 120%. The relative percent difference (RPD) between the LCS and LCSD results must be no greater than the established acceptance limit of 20%.

All analytes associated with the LCS/LCSD analysis exhibited recoveries and RPDs within the control limits.

6. Serial Dilution (SD) Analysis

All metal analytes must exhibit a percent deviation within the established acceptance limit of less than or equal to 10%. The SD control limit does not apply for SDs where the analyte's concentration detected in the parent sample is less than fifty times the instrument detection limit (IDL). In the instance where this is

true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory qualifier will be removed. Sample results associated with SD exceedances where the parent sample is not site-specific are not qualified.

Sample location MW-2-GW-04282016 was used in the serial dilution analysis in SDG 500-110948. All analytes associated with the serial dilution analyses exhibited acceptable %Ds except as presented in the following table. The laboratory flagged the total manganese serial dilution as exceeding the 10% control limit; however, the total manganese result is less than fifty times the IDL. Therefore no qualification is required for manganese.

Sample Location	Analyte	Serial Dilution (%D)
SDG 500-110948 MW-2-GW-04282016	Total Calcium	12%
	Total Iron	13%

The criteria used to evaluate the serial dilution are presented in the following table. In the case of a serial dilution deviation, the sample results are qualified as documented in the table below. The qualifications are applied to all sample results associated with this analytical batch.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

7. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit for water matrices of two times the RL is applied to the difference between the results.

Results for the field duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SDG 500-110872 MW-13-GW-04282016 / DUP-1(04282016)	Total Aluminum	0.20 U	0.066 J	AC
	Total Arsenic	0.0087 J	0.0075 J	AC
	Dissolved Arsenic	0.0049 J	0.0085 J	AC
	Total Barium	0.24	0.25	4.1 %
	Dissolved Barium	0.24	0.25	4.1 %
	Total Calcium	110	120	8.7 %
	Dissolved Calcium	110	110	0 %
	Total Chromium	0.0044 J	0.0045 J	AC
	Dissolved Chromium	0.0035 J	0.0045 J	AC
	Total Cobalt	0.0027 J	0.0026 J	AC
	Dissolved Cobalt	0.0017 J	0.0025 J	AC

Sample ID / Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SDG 500-110872 MW-13-GW-04282016 / DUP-1(04282016)	Total Copper	0.0022 J	0.0025 J	AC
	Total Iron	7.4	7.3	1.4 %
	Dissolved Iron	6.7	7.5	11.3 %
	Total Lead	0.0050 U	0.0029 J	AC
	Total Magnesium	42	43	2.4 %
	Dissolved Magnesium	43	46	6.7 %
	Total Manganese	0.42	0.35	18.2 %
	Dissolved Manganese	0.35	0.37	5.6 %
	Total Nickel	0.011	0.011	0.0 %
	Dissolved Nickel	0.011	0.011	0.0 %
	Total Potassium	64	68	6.1 %
	Dissolved Potassium	66	71	7.3 %
	Total Selenium	0.010 U	0.0059 J	AC
	Dissolved Selenium	0.010 U	0.0077 J	AC
	Total Sodium	230	240	4.3 %
	Dissolved Sodium	230	240	4.3 %
	Total Vanadium	0.0035 J	0.0039 J	AC
	Dissolved Vanadium	0.0033 J	0.0036 J	AC
SDG 500-110948 MW-6-GW-04292016 / DUP-2 (04292016)	Total Aluminum	0.47	0.51	8.2 %
	Dissolved Aluminum	0.38	0.27	33.8 %
	Total Arsenic	0.024	0.023	4.3 %
	Dissolved Arsenic	0.024	0.021	13.3 %
	Total Barium	0.29	0.31	6.7 %
	Dissolved Barium	0.31	0.29	6.7 %
	Total Cadmium	0.0022	0.0022	0.0 %
	Dissolved Cadmium	0.0016 J	0.0014 J	AC
	Total Calcium	30	28	6.9 %
	Dissolved Calcium	27	26	3.8 %
	Total Chromium	0.13	0.14	7.4 %
	Dissolved Chromium	0.14	0.13	7.4 %
	Total Cobalt	0.032	0.036	11.8 %
	Dissolved Cobalt	0.036	0.034	5.7 %
	Total Copper	0.012	0.013	8.0 %
	Dissolved Copper	0.0090 J	0.0048 J	AC
	Total Iron	2.0	2.2	9.5 %
	Dissolved Iron	2.1	2.0	4.9 %
	Total Lead	0.11	0.13	16.7 %

Sample ID / Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SDG 500-110948 MW-6-GW-04292016 / DUP-2 (04292016)	Dissolved Lead	0.076	0.032	81.5 %
	Total Magnesium	28	29	3.5 %
	Dissolved Magnesium	29	28	3.5 %
	Total Manganese	0.0099 J	0.0093 J	AC
	Dissolved Manganese	0.0087 J	0.0084 J	AC
	Total Nickel	0.13	0.14	7.4 %
	Dissolved Nickel	0.14	0.14	0.0 %
	Total Potassium	570	610	6.8 %
	Dissolved Potassium	610	590	3.3 %
	Total Sodium	3100	3300	6.3 %
	Dissolved Sodium	3300	3200	3.1 %
	Total Vanadium	0.057	0.057	0.0 %
	Dissolved Vanadium	0.054	0.050	7.7 %
	Total Zinc	0.17	0.18	5.7 %
	Dissolved Zinc	0.12	0.060	66.7 %
	Total Mercury	0.00020	0.00020	0.0 %

AC Acceptable
J Estimated (result is < RL)
U Not detected

The dissolved lead and dissolved zinc results exhibited RPDs greater than the control limit for the field duplicate samples MW-6-GW-04292016 and DUP-2 (04292016). The dissolved lead and dissolved zinc results were qualified as estimated for all sample locations in SDG 500-110948..

8. Assessment of Dissolved versus Total Results

The results for dissolved metal analytes should be less than 120% of the associated total metal result for those analytes that are at least five times the reporting limit (RL).

The calculated difference between the total and the dissolved sample results were within the control limit.

9. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6010C	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma – Atomic Emission Spectrometry (ICP)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X	X		
B. Method Blanks		X	X		
C. Equipment/Field Blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) Accuracy (%R)		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Post-Digestion Spike (PDS) Accuracy (%R)	X				X
Post-Digestion Spike Duplicate (PDSD) %R	X				X
PDS/PDSD Precision (RPD)	X				X
Laboratory Duplicate Sample RPD		X		X	
Field Duplicate Sample RPD		X	X		
ICP Serial Dilution		X	X		
Dilution Factor		X		X	
Dissolved versus Total Results		X		X	
Moisture Content					X
Tier II Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X	X		
RL Check Standard		X		X	
ICP Interference Check		X		X	
Quantitation transcriptions/calculations		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R – Percent recovery
RPD – Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Ammonia-N by SM 4500-NH3-G	Water	28 days from collection to analysis	Cool to < 6 °C; pH of < 2
Nitrate-N by EPA 353.2	Water	28 days from collection to analysis	Cool to < 6 °C
Nitrite-N by SM4500-NO2-B	Water	48 hours from collection to analysis	Cool to < 6 °C
Nitrate-N, Nitrite-N by SM4500-NO3-F	Water	48 hours from collection to analysis	Cool to < 6 °C; pH of < 2
Sulfate by SW-846 9038	Water	28 days from collection to analysis	Cool to < 6 °C
Sulfide by SW-846 9034	Water	7 days from collection to analysis	Cool to < 6 °C
Total Organic Carbon (TOC) by SW-846 9060	Water	28 days from collection to analysis	Cool to < 6 °C; pH of < 2
Total Suspended Solids by SM 2540-D	Water	7 days from collection to analysis	Cool to < 6 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected analyte in an associated blank (common laboratory contaminants are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All analytes associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the analytes listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analyte	Sample Result	Qualification
SDG 500-110798 MW-3-GW-04272016 MW-4-GW-04272016 MW-5-GW-04272016	Nitrite	Detected sample results < RL and < BAL	"UB" at the sample reporting limit (RL)

Sample Locations	Analyte	Sample Result	Qualification
SDG 500-110872 MW-1-GW-04282016 MW-13-GW-04282016 MW-11-GW-04282016 DUP-1(04282016)	Nitrite	Detected sample results < RL and < BAL	"UB" at the sample reporting limit (RL)

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

3.1 Initial Calibration

The initial calibration must exhibit a correlation coefficient greater than 0.995. A technical review of the data applies limits to all analytes with no exceptions.

3.2 Continuing Calibration

All target analytes associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (±10%).

All analytes associated with the initial and continuing calibrations were within the specified control limits. The correct frequency and type of standards were analyzed.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) / Laboratory Duplicate Analyses

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All analytes must exhibit recoveries within the established acceptance limits of 75% to 125%. When a MSD analysis is performed, the relative percent difference (RPD) between the MS/MSD results must be within the established acceptance limits of 20% for water matrices and 35% for soil matrices.

Note: The MS/MSD control limits do not apply for MS/MSD analyses performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

All analytes associated with the MS/MSD analyses exhibited acceptable recoveries and RPDs between the MS and MSD results.

4.2 Laboratory Duplicate Sample Analysis

The laboratory duplicate sample relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to five times the reporting limit (RL). A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the

RL, a control limit of one times the RL is applied for water matrices and two times the RL for soil matrices.

The laboratory duplicate sample results exhibited RPDs within the control limit.

8. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The spiked analytes used in the LCS/LCSD analysis must exhibit recoveries within the control limits of 80% and 120%. The relative percent difference (RPD) between the LCS and LCSD results must be within the control limit of 20%.

All analytes associated with the LCS/LCSD analyses exhibited recoveries and RPDs within the control limits.

6. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit for water matrices of two times the RL is applied to the difference between the results.

Results for duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
SDG 500-110872 MW-13-GW-04282016 / DUP-1(04282016)	Nitrate-N	0.10 U	0.10 U	AC
	Total Suspended Solids (TSS)	14	26	60.0 %
	Sulfide	1.7	1.7	0.0 %
	Total Organic Carbon (TOC)	67	56	17.9 %
SDG 500-110948 MW-6-GW-04292016 / DUP-2 (04292016)	Nitrate-N	0.10 U	0.10 U	AC
	Total Suspended Solids (TSS)	17	19	11.1 %
	Sulfide	7.9	4.5	54.8 %
	Total Organic Carbon (TOC)	360	350	2.8 %

AC Acceptable
U Not detected

The TSS results for the field duplicate samples MW-13-GW-04282016 and DUP-1(04282016) exhibited a RPD greater than the control limit. The TSS results for MW-13-GW-04282016 and DUP-1(04282016) were qualified as estimated.

The sulfide results for the field duplicate samples MW-6-GW-04292016 and DUP-2 (04292016) exhibited a RPD greater than the control limit. The sulfide results for MW-6-GW-04292016 and DUP-2 (04292016) were qualified as estimated.

7. System Performance and Overall Assessment

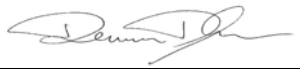
Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: SW-846 9034, 9038, and 9060, USEPA Method 353.2, and Standard Methods (SM) 2540D, 4500-NH3-G, 4500-NO2-B, and 4500-NO3-F	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X	X		
B. Method Blanks		X	X		
C. Equipment/Field Blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD RPD		X		X	
Laboratory Duplicate Sample RPD		X		X	
Field Duplicate Sample RPD		X	X		
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
Initial calibration %RSD or correlation coefficient		X		X	
Continuing calibration %R		X		X	
Raw Data		X		X	
Quantitation transcriptions/calculations		X		X	
Reporting limits adjusted for sample dilutions		X		X	

%RSD – relative standard deviation
%R – percent recovery
RPD – relative percent difference
%D – difference

Validation Performed By: Dennis Dyke

Signature: 

Date: June 15, 2016

Peer Review: Joseph C. Houser

Date: June 20, 2016

CHAIN OF CUSTODY /
CORRECTED SAMPLE ANALYSIS DATA SHEETS

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page ___ of ___

Lab Work Order #: 500-110798

Send Results to:

Contact & Company Name:	Arcadis
Telephone:	312 575 3772
Address:	120 S. LaSalle St. Suite 1350
Fax:	
City / State / Zip	Chicago IL 60603
E-mail Address:	ellyn.gates@arcadis.com
Project Name/Location (City, State):	LCCS Chicago, IL
Project #:	CI001805.0002.00004
Sampler's Printed Name:	Nicholas Ickes
Sampler's Signature:	

Preservative	E	E	C	C	A	A	
Filtered (✓)	N	N	N	✓	N	N	N
# of Containers	6		1	1	1		7
Container Information							

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: _____

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	8270D (MOD) List 4.2	9056A 8021B	7470A Mercury 6010C TAL Metals - HS	7470A Mercury 6010C TAL Metals - HS	SM4500NH3-G Ammonia	SW4500_NO2_B Nitrogen, Nitrate-Nitrite	See Special Instructions
MW-3-GW-04272016	4-27-16	0952		✓	W	X	X	X	X	X	X	X
MW-4-GW-04272016	4-27-16	1217		✓	W	X	X	X	X	X	X	X
MW-5-GW-04272016	4-27-16	1430		✓	W	X	X	X	X	X	X	X

REMARKS

500-110798 COC

Special Instructions/Comments: 9034_Calc-Sulfide; 8260B-Target Compound List 4.2; 9060A-(MOD) Local Method; SM4500_NO2_B-Nitrogen, Nitrite; 9038-Sulfate; 2540D-Total Suspended Solids.

☐ Special QA/QC Instructions(✓):

*Level IV Data Package

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name:	Cooler Custody Seal (✓)	Printed Name: Nicholas Ickes	Printed Name: David Beckner	Printed Name: David Beckner	Printed Name: Sherri Scott
☐ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements:	Sample Receipt:	Firm: Arcadis	Firm/Courier: TA	Firm/Courier: TA	Firm: TA-CAT
Shipping Tracking #:	Condition/Cooler Temp: 2.8, 3.1	Date/Time: 4-27-16 1533	Date/Time: 4-27-16 1533	Date/Time: 4-27-16 1620	Date/Time: 4/28/15 0640

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

Client Sample ID: MW-3-GW-04272016

Date Collected: 04/27/16 09:52
Date Received: 04/27/16 16:20

Lab Sample ID: 500-110798-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<20		20	7.6	ug/L			05/10/16 18:31	20
1,1,2,2-Tetrachloroethane	<20		20	8.0	ug/L			05/10/16 18:31	20
1,1,2-Trichloro-1,2,2-trifluoroethane	<20		20	9.2	ug/L			05/10/16 18:31	20
1,1,2-Trichloroethane	<20		20	7.0	ug/L			05/10/16 18:31	20
1,1-Dichloroethane	<20		20	8.2	ug/L			05/10/16 18:31	20
1,1-Dichloroethene	<20		20	7.8	ug/L			05/10/16 18:31	20
1,2,4-Trichlorobenzene	<20		20	6.8	ug/L			05/10/16 18:31	20
1,2-Dibromo-3-Chloropropane	<100		100	40	ug/L			05/10/16 18:31	20
1,2-Dibromoethane	<20		20	7.7	ug/L			05/10/16 18:31	20
1,2-Dichlorobenzene	<20		20	6.7	ug/L			05/10/16 18:31	20
1,2-Dichloroethane	<20		20	7.8	ug/L			05/10/16 18:31	20
1,2-Dichloropropane	<20		20	8.6	ug/L			05/10/16 18:31	20
1,3-Dichlorobenzene	<20		20	8.0	ug/L			05/10/16 18:31	20
1,4-Dichlorobenzene	<20		20	7.3	ug/L			05/10/16 18:31	20
2-Hexanone	<100	UJ	100	31	ug/L			05/10/16 18:31	20
Acetone	<100		100	35	ug/L			05/10/16 18:31	20
Benzene	**250**	D	10	2.9	ug/L			05/10/16 18:31	20
Bromodichloromethane	<20		20	7.4	ug/L			05/10/16 18:31	20
Bromoform	<20		20	9.7	ug/L			05/10/16 18:31	20
Bromomethane	<40		40	16	ug/L			05/10/16 18:31	20
Carbon disulfide	<40		40	9.0	ug/L			05/10/16 18:31	20
Carbon tetrachloride	<20		20	7.7	ug/L			05/10/16 18:31	20
Chlorobenzene	<20		20	7.7	ug/L			05/10/16 18:31	20
Chloroethane	<20		20	10	ug/L			05/10/16 18:31	20
Chloroform	<20		20	7.4	ug/L			05/10/16 18:31	20
Chloromethane	<20		20	6.4	ug/L			05/10/16 18:31	20
cis-1,2-Dichloroethene	<20		20	8.2	ug/L			05/10/16 18:31	20
cis-1,3-Dichloropropene	<20		20	8.3	ug/L			05/10/16 18:31	20
Cyclohexane	<20		20	9.7	ug/L			05/10/16 18:31	20
Dibromochloromethane	<20		20	9.8	ug/L			05/10/16 18:31	20
Dichlorodifluoromethane	<40		40	13	ug/L			05/10/16 18:31	20
Ethylbenzene	**42**	D	10	3.7	ug/L			05/10/16 18:31	20
Isopropylbenzene	<20		20	7.7	ug/L			05/10/16 18:31	20
Methyl acetate	<100	UJ	100	40	ug/L			05/10/16 18:31	20
Methyl Ethyl Ketone	<100	UJ	100	42	ug/L			05/10/16 18:31	20
methyl isobutyl ketone	<100	UJ	100	43	ug/L			05/10/16 18:31	20
Methyl tert-butyl ether	<20		20	7.9	ug/L			05/10/16 18:31	20
Methylcyclohexane	<20		20	6.3	ug/L			05/10/16 18:31	20
Methylene Chloride	<100		100	33	ug/L			05/10/16 18:31	20
Styrene	<20		20	7.7	ug/L			05/10/16 18:31	20
Tetrachloroethene	<20		20	7.4	ug/L			05/10/16 18:31	20
Toluene	**280**	D	10	3.0	ug/L			05/10/16 18:31	20
trans-1,2-Dichloroethene	<20		20	7.0	ug/L			05/10/16 18:31	20
trans-1,3-Dichloropropene	<20		20	7.2	ug/L			05/10/16 18:31	20
Trichloroethene	<10		10	3.3	ug/L			05/10/16 18:31	20
Trichlorofluoromethane	<20	~~F1~~	20	8.5	ug/L			05/10/16 18:31	20
Vinyl chloride	<10		10	4.1	ug/L			05/10/16 18:31	20
Xylenes, Total	**290**	D	20	4.4	ug/L			05/10/16 18:31	20

Client Sample ID: MW-3-GW-04272016

Date Collected: 04/27/16 09:52
Date Received: 04/27/16 16:20

Lab Sample ID: 500-110798-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*71 - 127*		*05/10/16 18:31*	*20*
4-Bromofluorobenzene (Surr)	*84*		*71 - 120*		*05/10/16 18:31*	*20*
Dibromofluoromethane	*108*		*70 - 120*		*05/10/16 18:31*	*20*
Toluene-d8 (Surr)	*95*		*75 - 120*		*05/10/16 18:31*	*20*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**38**	D	20	1.5	ug/L		04/28/16 08:38	05/10/16 15:04	5
2,2'-oxybis[1-chloropropane]	<8.1		8.1	1.5	ug/L		04/28/16 08:38	05/10/16 15:04	5
2,4,5-Trichlorophenol	<40		40	10	ug/L		04/28/16 08:38	05/10/16 15:04	5
2,4,6-Trichlorophenol	<20		20	2.9	ug/L		04/28/16 08:38	05/10/16 15:04	5
2,4-Dichlorophenol	<40		40	10	ug/L		04/28/16 08:38	05/10/16 15:04	5
2,4-Dimethylphenol	**280**	D	40	7.3	ug/L		04/28/16 08:38	05/10/16 15:04	5
2,4-Dinitrophenol	<81		81	35	ug/L		04/28/16 08:38	05/10/16 15:04	5
2,4-Dinitrotoluene	<4.0		4.0	0.99	ug/L		04/28/16 08:38	05/10/16 15:04	5
2,6-Dinitrotoluene	<2.0		2.0	0.30	ug/L		04/28/16 08:38	05/10/16 15:04	5
2-Chloronaphthalene	<8.1		8.1	0.95	ug/L		04/28/16 08:38	05/10/16 15:04	5
2-Chlorophenol	<20		20	2.3	ug/L		04/28/16 08:38	05/10/16 15:04	5
2-Methylphenol	**180**	D	8.1	1.2	ug/L		04/28/16 08:38	05/10/16 15:04	5
2-Nitroaniline	<20		20	5.2	ug/L		04/28/16 08:38	05/10/16 15:04	5
2-Nitrophenol	<40		40	10	ug/L		04/28/16 08:38	05/10/16 15:04	5
3,3'-Dichlorobenzidine	<20		20	6.9	ug/L		04/28/16 08:38	05/10/16 15:04	5
3-Nitroaniline	<40		40	7.2	ug/L		04/28/16 08:38	05/10/16 15:04	5
4,6-Dinitro-2-methylphenol	<81		81	24	ug/L		04/28/16 08:38	05/10/16 15:04	5
4-Bromophenyl phenyl ether	<20		20	2.2	ug/L		04/28/16 08:38	05/10/16 15:04	5
4-Chloro-3-methylphenol	<40		40	9.3	ug/L		04/28/16 08:38	05/10/16 15:04	5
4-Chloroaniline	<40		40	8.1	ug/L		04/28/16 08:38	05/10/16 15:04	5
4-Chlorophenyl phenyl ether	<20		20	2.6	ug/L		04/28/16 08:38	05/10/16 15:04	5
4-Nitroaniline	<40		40	6.7	ug/L		04/28/16 08:38	05/10/16 15:04	5
4-Nitrophenol	<81		81	30	ug/L		04/28/16 08:38	05/10/16 15:04	5
Acenaphthene	**29**	D	4.0	1.2	ug/L		04/28/16 08:38	05/10/16 15:04	5
Acenaphthylene	**3.7**	J D	4.0	1.1	ug/L		04/28/16 08:38	05/10/16 15:04	5
Acetophenone	<20		20	2.7	ug/L		04/28/16 08:38	05/10/16 15:04	5
Anthracene	**12**	D	4.0	1.3	ug/L		04/28/16 08:38	05/10/16 15:04	5
Atrazine	<20		20	2.5	ug/L		04/28/16 08:38	05/10/16 15:04	5
Benzaldehyde	<81	UJ	81	61	ug/L		04/28/16 08:38	05/10/16 15:04	5
Benzo[a]anthracene	<0.81		0.81	0.23	ug/L		04/28/16 08:38	05/10/16 15:04	5
Benzo[a]pyrene	<0.81		0.81	0.40	ug/L		04/28/16 08:38	05/10/16 15:04	5
Benzo[b]fluoranthene	<0.81		0.81	0.33	ug/L		04/28/16 08:38	05/10/16 15:04	5
Benzo[g,h,i]perylene	<4.0		4.0	1.5	ug/L		04/28/16 08:38	05/10/16 15:04	5
Benzo[k]fluoranthene	<0.81		0.81	0.26	ug/L		04/28/16 08:38	05/10/16 15:04	5
Bis(2-chloroethoxy)methane	<8.1		8.1	1.1	ug/L		04/28/16 08:38	05/10/16 15:04	5
Bis(2-chloroethyl)ether	<8.1		8.1	1.2	ug/L		04/28/16 08:38	05/10/16 15:04	5
Bis(2-ethylhexyl) phthalate	<40		40	6.9	ug/L		04/28/16 08:38	05/10/16 15:04	5
Butyl benzyl phthalate	<8.1		8.1	1.9	ug/L		04/28/16 08:38	05/10/16 15:04	5
Caprolactam	<40		40	6.0	ug/L		04/28/16 08:38	05/10/16 15:04	5
Carbazole	**140**	D	20	1.4	ug/L		04/28/16 08:38	05/10/16 15:04	5
Chrysene	<2.0		2.0	0.27	ug/L		04/28/16 08:38	05/10/16 15:04	5
Dibenz(a,h)anthracene	<1.2		1.2	0.20	ug/L		04/28/16 08:38	05/10/16 15:04	5
Dibenzofuran	**56**	D	8.1	1.1	ug/L		04/28/16 08:38	05/10/16 15:04	5

Client Sample ID: MW-3-GW-04272016
Date Collected: 04/27/16 09:52
Date Received: 04/27/16 16:20

Lab Sample ID: 500-110798-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	<8.1		8.1	1.5	ug/L		04/28/16 08:38	05/10/16 15:04	5
Dimethyl phthalate	<8.1		8.1	1.3	ug/L		04/28/16 08:38	05/10/16 15:04	5
Di-n-butyl phthalate	<20		20	2.9	ug/L		04/28/16 08:38	05/10/16 15:04	5
Di-n-octyl phthalate	<40		40	4.2	ug/L		04/28/16 08:38	05/10/16 15:04	5
Fluoranthene	**7.1**	D	4.0	1.8	ug/L		04/28/16 08:38	05/10/16 15:04	5
Fluorene	**83**	D	4.0	0.98	ug/L		04/28/16 08:38	05/10/16 15:04	5
Hexachlorobenzene	<2.0		2.0	0.32	ug/L		04/28/16 08:38	05/10/16 15:04	5
Hexachlorobutadiene	<20	* UJ	20	2.1	ug/L		04/28/16 08:38	05/10/16 15:04	5
Hexachlorocyclopentadiene	<81	* R	81	26	ug/L		04/28/16 08:38	05/10/16 15:04	5
Hexachloroethane	<20	* UJ	20	2.4	ug/L		04/28/16 08:38	05/10/16 15:04	5
Indeno[1,2,3-cd]pyrene	<0.81		0.81	0.30	ug/L		04/28/16 08:38	05/10/16 15:04	5
Isophorone	<8.1		8.1	1.5	ug/L		04/28/16 08:38	05/10/16 15:04	5
Nitrobenzene	<4.0		4.0	1.8	ug/L		04/28/16 08:38	05/10/16 15:04	5
N-Nitrosodi-n-propylamine	<2.0		2.0	0.62	ug/L		04/28/16 08:38	05/10/16 15:04	5
N-Nitrosodiphenylamine	<4.0		4.0	1.5	ug/L		04/28/16 08:38	05/10/16 15:04	5
Pentachlorophenol	<81		81	16	ug/L		04/28/16 08:38	05/10/16 15:04	5
Phenanthrene	**69**	D	4.0	1.2	ug/L		04/28/16 08:38	05/10/16 15:04	5
Phenol	**85**	D	20	2.7	ug/L		04/28/16 08:38	05/10/16 15:04	5
Pyrene	**4.7**	D	4.0	1.7	ug/L		04/28/16 08:38	05/10/16 15:04	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*30 - 123*	*04/28/16 08:38*	*05/10/16 15:04*	*5*
2-Fluorophenol (Surr)	*75*		*30 - 110*	*04/28/16 08:38*	*05/10/16 15:04*	*5*
Nitrobenzene-d5 (Surr)	*84*		*33 - 139*	*04/28/16 08:38*	*05/10/16 15:04*	*5*
Phenol-d5 (Surr)	*66*		*20 - 100*	*04/28/16 08:38*	*05/10/16 15:04*	*5*
Terphenyl-d14 (Surr)	*113*		*42 - 150*	*04/28/16 08:38*	*05/10/16 15:04*	*5*
2,4,6-Tribromophenol (Surr)	*114*		*30 - 150*	*04/28/16 08:38*	*05/10/16 15:04*	*5*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**360**	D	4.0	0.53	ug/L		04/28/16 08:38	05/10/16 17:59	10
3 & 4 Methylphenol	**280**	D	16	3.6	ug/L		04/28/16 08:38	05/10/16 17:59	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*30 - 123*	*04/28/16 08:38*	*05/10/16 17:59*	*10*
2-Fluorophenol (Surr)	*69*		*30 - 110*	*04/28/16 08:38*	*05/10/16 17:59*	*10*
Nitrobenzene-d5 (Surr)	*76*		*33 - 139*	*04/28/16 08:38*	*05/10/16 17:59*	*10*
Phenol-d5 (Surr)	*62*		*20 - 100*	*04/28/16 08:38*	*05/10/16 17:59*	*10*
Terphenyl-d14 (Surr)	*108*		*42 - 150*	*04/28/16 08:38*	*05/10/16 17:59*	*10*
2,4,6-Tribromophenol (Surr)	*101*		*30 - 150*	*04/28/16 08:38*	*05/10/16 17:59*	*10*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**3600**	D	81	25	ug/L		04/28/16 08:38	05/10/16 18:24	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*D*	*30 - 123*	*04/28/16 08:38*	*05/10/16 18:24*	*100*
2-Fluorophenol (Surr)	*0*	*D*	*30 - 110*	*04/28/16 08:38*	*05/10/16 18:24*	*100*
Nitrobenzene-d5 (Surr)	*0*	*D*	*33 - 139*	*04/28/16 08:38*	*05/10/16 18:24*	*100*
Phenol-d5 (Surr)	*0*	*D*	*20 - 100*	*04/28/16 08:38*	*05/10/16 18:24*	*100*
Terphenyl-d14 (Surr)	*0*	*D*	*42 - 150*	*04/28/16 08:38*	*05/10/16 18:24*	*100*

Client Sample ID: MW-3-GW-04272016

Date Collected: 04/27/16 09:52
Date Received: 04/27/16 16:20

Lab Sample ID: 500-110798-1

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL2 (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*D*	*30 - 150*	*04/28/16 08:38*	*05/10/16 18:24*	*100*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.040		0.040	0.0053	ug/L		04/28/16 10:21	05/02/16 19:42	1
alpha-BHC	<0.040		0.040	0.0026	ug/L		04/28/16 10:21	05/02/16 19:42	1
alpha-Chlordane	<0.040		0.040	0.0044	ug/L		04/28/16 10:21	05/02/16 19:42	1
beta-BHC	<0.040		0.040	0.010	ug/L		04/28/16 10:21	05/02/16 19:42	1
4,4'-DDD	<0.040		0.040	0.013	ug/L		04/28/16 10:21	05/02/16 19:42	1
4,4'-DDE	<0.040		0.040	0.0038	ug/L		04/28/16 10:21	05/02/16 19:42	1
4,4'-DDT	<0.040		0.040	0.0032	ug/L		04/28/16 10:21	05/02/16 19:42	1
delta-BHC	<0.040		0.040	0.010	ug/L		04/28/16 10:21	05/02/16 19:42	1
Dieldrin	<0.040		0.040	0.013	ug/L		04/28/16 10:21	05/02/16 19:42	1
Endosulfan I	<0.040		0.040	0.0041	ug/L		04/28/16 10:21	05/02/16 19:42	1
Endosulfan II	<0.040		0.040	0.0028	ug/L		04/28/16 10:21	05/02/16 19:42	1
Endosulfan sulfate	<0.040		0.040	0.012	ug/L		04/28/16 10:21	05/02/16 19:42	1
Endrin	<0.040		0.040	0.014	ug/L		04/28/16 10:21	05/02/16 19:42	1
Endrin aldehyde	<0.040		0.040	0.0082	ug/L		04/28/16 10:21	05/02/16 19:42	1
Endrin ketone	<0.040		0.040	0.017	ug/L		04/28/16 10:21	05/02/16 19:42	1
gamma-BHC (Lindane)	<0.040		0.040	0.0056	ug/L		04/28/16 10:21	05/02/16 19:42	1
gamma-Chlordane	<0.040		0.040	0.0072	ug/L		04/28/16 10:21	05/02/16 19:42	1
Heptachlor	<0.040		0.040	0.014	ug/L		04/28/16 10:21	05/02/16 19:42	1
Heptachlor epoxide	<0.040		0.040	0.014	ug/L		04/28/16 10:21	05/02/16 19:42	1
Methoxychlor	<0.080		0.080	0.023	ug/L		04/28/16 10:21	05/02/16 19:42	1
Toxaphene	<0.40		0.40	0.20	ug/L		04/28/16 10:21	05/02/16 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*50*		*30 - 143*	*04/28/16 10:21*	*05/02/16 19:42*	*1*
Tetrachloro-m-xylene	*122*	*X*	*30 - 120*	*04/28/16 10:21*	*05/02/16 19:42*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.40		0.40	0.067	ug/L		04/28/16 10:21	05/03/16 15:32	1
PCB-1221	<0.40		0.40	0.20	ug/L		04/28/16 10:21	05/03/16 15:32	1
PCB-1232	<0.40		0.40	0.20	ug/L		04/28/16 10:21	05/03/16 15:32	1
PCB-1242	<0.40		0.40	0.20	ug/L		04/28/16 10:21	05/03/16 15:32	1
PCB-1248	<0.40		0.40	0.20	ug/L		04/28/16 10:21	05/03/16 15:32	1
PCB-1254	<0.40		0.40	0.20	ug/L		04/28/16 10:21	05/03/16 15:32	1
PCB-1260	<0.40		0.40	0.070	ug/L		04/28/16 10:21	05/03/16 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*60*		*30 - 127*	*04/28/16 10:21*	*05/03/16 15:32*	*1*
DCB Decachlorobiphenyl	*69*		*30 - 150*	*04/28/16 10:21*	*05/03/16 15:32*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		04/28/16 08:11	04/28/16 21:29	1
Antimony	<0.020		0.020	0.0064	mg/L		04/28/16 08:11	04/28/16 21:29	1
Arsenic	**0.0074**	**J**	0.010	0.0031	mg/L		04/28/16 08:11	04/28/16 21:29	1
Barium	**0.62**		0.010	0.0022	mg/L		04/28/16 08:11	04/28/16 21:29	1

Client Sample ID: MW-3-GW-04272016

Date Collected: 04/27/16 09:52
Date Received: 04/27/16 16:20

Lab Sample ID: 500-110798-1

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.00085	mg/L		04/28/16 08:11	04/28/16 21:29	1
Cadmium	**0.00097**	**J**	0.0020	0.00094	mg/L		04/28/16 08:11	04/28/16 21:29	1
Calcium	**58**		0.20	0.059	mg/L		04/28/16 08:11	04/28/16 21:29	1
Chromium	<0.010		0.010	0.0024	mg/L		04/28/16 08:11	04/28/16 21:29	1
Cobalt	<0.0050		0.0050	0.00096	mg/L		04/28/16 08:11	04/28/16 21:29	1
Copper	<0.010		0.010	0.0022	mg/L		04/28/16 08:11	04/28/16 21:29	1
Iron	**7.4**		0.20	0.10	mg/L		04/28/16 08:11	04/28/16 21:29	1
Lead	**0.0024**	**J**	0.0050	0.0024	mg/L		04/28/16 08:11	04/28/16 21:29	1
Magnesium	**80**		0.10	0.034	mg/L		04/28/16 08:11	04/28/16 21:29	1
Manganese	**0.33**		0.010	0.0034	mg/L		04/28/16 08:11	04/28/16 21:29	1
Nickel	**0.0068**	**J**	0.010	0.0031	mg/L		04/28/16 08:11	04/28/16 21:29	1
Potassium	**53**		0.50	0.16	mg/L		04/28/16 08:11	04/28/16 21:29	1
Selenium	<0.010		0.010	0.0046	mg/L		04/28/16 08:11	04/28/16 21:29	1
Silver	<0.0050		0.0050	0.0013	mg/L		04/28/16 08:11	04/28/16 21:29	1
Sodium	**280**		1.0	0.43	mg/L		04/28/16 08:11	04/28/16 21:29	1
Thallium	<0.010		0.010	0.0028	mg/L		04/28/16 08:11	04/28/16 21:29	1
Vanadium	<0.0050		0.0050	0.0019	mg/L		04/28/16 08:11	04/28/16 21:29	1
Zinc	<0.020		0.020	0.0090	mg/L		04/28/16 08:11	04/28/16 21:29	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		04/28/16 08:11	04/28/16 21:34	1
Antimony	<0.020		0.020	0.0064	mg/L		04/28/16 08:11	04/28/16 21:34	1
Arsenic	**0.0046**	**J**	0.010	0.0031	mg/L		04/28/16 08:11	04/28/16 21:34	1
Barium	**0.61**		0.010	0.0022	mg/L		04/28/16 08:11	04/28/16 21:34	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		04/28/16 08:11	04/28/16 21:34	1
Cadmium	<0.0020		0.0020	0.00094	mg/L		04/28/16 08:11	04/28/16 21:34	1
Calcium	**57**		0.20	0.059	mg/L		04/28/16 08:11	04/28/16 21:34	1
Chromium	<0.010		0.010	0.0024	mg/L		04/28/16 08:11	04/28/16 21:34	1
Cobalt	<0.0050		0.0050	0.00096	mg/L		04/28/16 08:11	04/28/16 21:34	1
Copper	<0.010		0.010	0.0022	mg/L		04/28/16 08:11	04/28/16 21:34	1
Iron	**7.3**		0.20	0.10	mg/L		04/28/16 08:11	04/28/16 21:34	1
Lead	<0.0050		0.0050	0.0024	mg/L		04/28/16 08:11	04/28/16 21:34	1
Magnesium	**79**		0.10	0.034	mg/L		04/28/16 08:11	04/28/16 21:34	1
Manganese	**0.31**		0.010	0.0034	mg/L		04/28/16 08:11	04/28/16 21:34	1
Nickel	**0.0063**	**J**	0.010	0.0031	mg/L		04/28/16 08:11	04/28/16 21:34	1
Potassium	**52**		0.50	0.16	mg/L		04/28/16 08:11	04/28/16 21:34	1
Selenium	<0.010		0.010	0.0046	mg/L		04/28/16 08:11	04/28/16 21:34	1
Silver	<0.0050		0.0050	0.0013	mg/L		04/28/16 08:11	04/28/16 21:34	1
Sodium	**270**		1.0	0.43	mg/L		04/28/16 08:11	04/28/16 21:34	1
Thallium	<0.010		0.010	0.0028	mg/L		04/28/16 08:11	04/28/16 21:34	1
Vanadium	<0.0050		0.0050	0.0019	mg/L		04/28/16 08:11	04/28/16 21:34	1
Zinc	<0.020		0.020	0.0090	mg/L		04/28/16 08:11	04/28/16 21:34	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		04/29/16 16:00	05/02/16 11:45	1

Client Sample ID: MW-3-GW-04272016

Date Collected: 04/27/16 09:52
Date Received: 04/27/16 16:20

Lab Sample ID: 500-110798-1

Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		04/29/16 16:00	05/02/16 11:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<1.0		1.0	0.22	mg/L			05/03/16 05:10	1
Sulfate	**50**		10	4.0	mg/L			05/05/16 08:01	2
Total Organic Carbon - Duplicates	**21**		1.0	0.23	mg/L			05/08/16 16:02	1
Nitrogen, Nitrate	<0.10		0.10	0.045	mg/L			05/03/16 14:20	1
Total Suspended Solids	**6.5**		5.0	1.6	mg/L			04/29/16 10:26	1
Ammonia	**32**	B	4.0	0.86	mg/L		05/09/16 19:05	05/09/16 21:52	20
Nitrogen, Nitrite	< 0.020 ~~0.0091 J B~~	UB	0.020	0.0032	mg/L			04/28/16 11:47	1
Nitrogen, Nitrate Nitrite	<0.10		0.10	0.045	mg/L			05/02/16 18:39	1

Client Sample ID: MW-4-GW-04272016

Date Collected: 04/27/16 12:17
Date Received: 04/27/16 16:20

Lab Sample ID: 500-110798-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0	0.38	ug/L			05/10/16 17:37	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.40	ug/L			05/10/16 17:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0	0.46	ug/L			05/10/16 17:37	1
1,1,2-Trichloroethane	<1.0		1.0	0.35	ug/L			05/10/16 17:37	1
1,1-Dichloroethane	**11**		1.0	0.41	ug/L			05/10/16 17:37	1
1,1-Dichloroethene	<1.0		1.0	0.39	ug/L			05/10/16 17:37	1
1,2,4-Trichlorobenzene	<1.0		1.0	0.34	ug/L			05/10/16 17:37	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0	2.0	ug/L			05/10/16 17:37	1
1,2-Dibromoethane	<1.0		1.0	0.39	ug/L			05/10/16 17:37	1
1,2-Dichlorobenzene	<1.0		1.0	0.33	ug/L			05/10/16 17:37	1
1,2-Dichloroethane	**56**		1.0	0.39	ug/L			05/10/16 17:37	1
1,2-Dichloropropane	<1.0		1.0	0.43	ug/L			05/10/16 17:37	1
1,3-Dichlorobenzene	<1.0		1.0	0.40	ug/L			05/10/16 17:37	1
1,4-Dichlorobenzene	<1.0		1.0	0.36	ug/L			05/10/16 17:37	1
2-Hexanone	<5.0	UJ	5.0	1.6	ug/L			05/10/16 17:37	1
Acetone	**19**		5.0	1.7	ug/L			05/10/16 17:37	1
Bromodichloromethane	<1.0		1.0	0.37	ug/L			05/10/16 17:37	1
Bromoform	<1.0		1.0	0.48	ug/L			05/10/16 17:37	1
Bromomethane	<2.0		2.0	0.80	ug/L			05/10/16 17:37	1
Carbon disulfide	**9.3**		2.0	0.45	ug/L			05/10/16 17:37	1
Carbon tetrachloride	<1.0		1.0	0.38	ug/L			05/10/16 17:37	1
Chlorobenzene	<1.0		1.0	0.39	ug/L			05/10/16 17:37	1
Chloroethane	<1.0		1.0	0.51	ug/L			05/10/16 17:37	1
Chloroform	<1.0		1.0	0.37	ug/L			05/10/16 17:37	1
Chloromethane	<1.0		1.0	0.32	ug/L			05/10/16 17:37	1
cis-1,2-Dichloroethene	**3.4**		1.0	0.41	ug/L			05/10/16 17:37	1
cis-1,3-Dichloropropene	<1.0		1.0	0.42	ug/L			05/10/16 17:37	1
Cyclohexane	**0.97**	J	1.0	0.49	ug/L			05/10/16 17:37	1
Dibromochloromethane	<1.0		1.0	0.49	ug/L			05/10/16 17:37	1
Dichlorodifluoromethane	<2.0		2.0	0.67	ug/L			05/10/16 17:37	1
Ethylbenzene	**2.6**		0.50	0.18	ug/L			05/10/16 17:37	1
Isopropylbenzene	<1.0		1.0	0.39	ug/L			05/10/16 17:37	1
Methyl acetate	**110**	J	5.0	2.0	ug/L			05/10/16 17:37	1
Methyl Ethyl Ketone	<5.0	UJ	5.0	2.1	ug/L			05/10/16 17:37	1
methyl isobutyl ketone	<5.0	UJ	5.0	2.2	ug/L			05/10/16 17:37	1
Methyl tert-butyl ether	<1.0		1.0	0.39	ug/L			05/10/16 17:37	1
Methylcyclohexane	<1.0		1.0	0.32	ug/L			05/10/16 17:37	1
Methylene Chloride	<5.0		5.0	1.6	ug/L			05/10/16 17:37	1
Styrene	<1.0		1.0	0.39	ug/L			05/10/16 17:37	1
Tetrachloroethene	<1.0		1.0	0.37	ug/L			05/10/16 17:37	1
Toluene	**13**		0.50	0.15	ug/L			05/10/16 17:37	1
trans-1,2-Dichloroethene	<1.0		1.0	0.35	ug/L			05/10/16 17:37	1
trans-1,3-Dichloropropene	<1.0		1.0	0.36	ug/L			05/10/16 17:37	1
Trichloroethene	**0.72**		0.50	0.16	ug/L			05/10/16 17:37	1
Trichlorofluoromethane	<1.0		1.0	0.43	ug/L			05/10/16 17:37	1
Vinyl chloride	**5.2**		0.50	0.20	ug/L			05/10/16 17:37	1
Xylenes, Total	**3.5**		1.0	0.22	ug/L			05/10/16 17:37	1

Client Sample ID: MW-4-GW-04272016

Date Collected: 04/27/16 12:17
Date Received: 04/27/16 16:20

Lab Sample ID: 500-110798-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*71 - 127*		*05/10/16 17:37*	*1*
4-Bromofluorobenzene (Surr)	*87*		*71 - 120*		*05/10/16 17:37*	*1*
Dibromofluoromethane	*105*		*70 - 120*		*05/10/16 17:37*	*1*
Toluene-d8 (Surr)	*95*		*75 - 120*		*05/10/16 17:37*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**490**	D	5.0	1.5	ug/L			05/10/16 18:04	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*71 - 127*		*05/10/16 18:04*	*10*
4-Bromofluorobenzene (Surr)	*85*		*71 - 120*		*05/10/16 18:04*	*10*
Dibromofluoromethane	*107*		*70 - 120*		*05/10/16 18:04*	*10*
Toluene-d8 (Surr)	*94*		*75 - 120*		*05/10/16 18:04*	*10*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	<4.2		4.2	0.30	ug/L		04/28/16 08:38	05/10/16 15:29	1
2,2'-oxybis[1-chloropropane]	<1.7		1.7	0.32	ug/L		04/28/16 08:38	05/10/16 15:29	1
2,4,5-Trichlorophenol	<8.4		8.4	2.2	ug/L		04/28/16 08:38	05/10/16 15:29	1
2,4,6-Trichlorophenol	<4.2		4.2	0.60	ug/L		04/28/16 08:38	05/10/16 15:29	1
2,4-Dichlorophenol	<8.4		8.4	2.2	ug/L		04/28/16 08:38	05/10/16 15:29	1
2,4-Dimethylphenol	**13**		8.4	1.5	ug/L		04/28/16 08:38	05/10/16 15:29	1
2,4-Dinitrophenol	<17		17	7.2	ug/L		04/28/16 08:38	05/10/16 15:29	1
2,4-Dinitrotoluene	<0.84		0.84	0.21	ug/L		04/28/16 08:38	05/10/16 15:29	1
2,6-Dinitrotoluene	<0.42		0.42	0.062	ug/L		04/28/16 08:38	05/10/16 15:29	1
2-Chloronaphthalene	<1.7		1.7	0.20	ug/L		04/28/16 08:38	05/10/16 15:29	1
2-Chlorophenol	<4.2		4.2	0.47	ug/L		04/28/16 08:38	05/10/16 15:29	1
2-Methylnaphthalene	<0.42		0.42	0.055	ug/L		04/28/16 08:38	05/10/16 15:29	1
2-Methylphenol	**5.0**		1.7	0.26	ug/L		04/28/16 08:38	05/10/16 15:29	1
2-Nitroaniline	<4.2		4.2	1.1	ug/L		04/28/16 08:38	05/10/16 15:29	1
2-Nitrophenol	<8.4		8.4	2.1	ug/L		04/28/16 08:38	05/10/16 15:29	1
3 & 4 Methylphenol	**9.5**		1.7	0.38	ug/L		04/28/16 08:38	05/10/16 15:29	1
3,3'-Dichlorobenzidine	<4.2		4.2	1.4	ug/L		04/28/16 08:38	05/10/16 15:29	1
3-Nitroaniline	<8.4		8.4	1.5	ug/L		04/28/16 08:38	05/10/16 15:29	1
4,6-Dinitro-2-methylphenol	<17		17	5.0	ug/L		04/28/16 08:38	05/10/16 15:29	1
4-Bromophenyl phenyl ether	<4.2		4.2	0.45	ug/L		04/28/16 08:38	05/10/16 15:29	1
4-Chloro-3-methylphenol	<8.4		8.4	1.9	ug/L		04/28/16 08:38	05/10/16 15:29	1
4-Chloroaniline	<8.4		8.4	1.7	ug/L		04/28/16 08:38	05/10/16 15:29	1
4-Chlorophenyl phenyl ether	<4.2		4.2	0.53	ug/L		04/28/16 08:38	05/10/16 15:29	1
4-Nitroaniline	<8.4		8.4	1.4	ug/L		04/28/16 08:38	05/10/16 15:29	1
4-Nitrophenol	<17		17	6.2	ug/L		04/28/16 08:38	05/10/16 15:29	1
Acenaphthene	<0.84		0.84	0.26	ug/L		04/28/16 08:38	05/10/16 15:29	1
Acenaphthylene	<0.84		0.84	0.22	ug/L		04/28/16 08:38	05/10/16 15:29	1
Acetophenone	<4.2		4.2	0.56	ug/L		04/28/16 08:38	05/10/16 15:29	1
Anthracene	<0.84		0.84	0.28	ug/L		04/28/16 08:38	05/10/16 15:29	1
Atrazine	<4.2		4.2	0.52	ug/L		04/28/16 08:38	05/10/16 15:29	1
Benzaldehyde	<17	UJ	17	13	ug/L		04/28/16 08:38	05/10/16 15:29	1
Benzo[a]anthracene	<0.17		0.17	0.048	ug/L		04/28/16 08:38	05/10/16 15:29	1
Benzo[a]pyrene	<0.17	* UJ	0.17	0.083	ug/L		04/28/16 08:38	05/10/16 15:29	1
Benzo[b]fluoranthene	<0.17	* UJ	0.17	0.068	ug/L		04/28/16 08:38	05/10/16 15:29	1

Client Sample ID: MW-4-GW-04272016

Date Collected: 04/27/16 12:17
Date Received: 04/27/16 16:20

Lab Sample ID: 500-110798-2

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<0.84	* UJ	0.84	0.31	ug/L		04/28/16 08:38	05/10/16 15:29	1
Benzo[k]fluoranthene	<0.17	* UJ	0.17	0.054	ug/L		04/28/16 08:38	05/10/16 15:29	1
Bis(2-chloroethoxy)methane	<1.7		1.7	0.24	ug/L		04/28/16 08:38	05/10/16 15:29	1
Bis(2-chloroethyl)ether	<1.7		1.7	0.25	ug/L		04/28/16 08:38	05/10/16 15:29	1
Bis(2-ethylhexyl) phthalate	<8.4		8.4	1.4	ug/L		04/28/16 08:38	05/10/16 15:29	1
Butyl benzyl phthalate	<1.7		1.7	0.40	ug/L		04/28/16 08:38	05/10/16 15:29	1
Caprolactam	<8.4		8.4	1.2	ug/L		04/28/16 08:38	05/10/16 15:29	1
Carbazole	<4.2		4.2	0.30	ug/L		04/28/16 08:38	05/10/16 15:29	1
Chrysene	<0.42		0.42	0.057	ug/L		04/28/16 08:38	05/10/16 15:29	1
Dibenz(a,h)anthracene	<0.25	* UJ	0.25	0.043	ug/L		04/28/16 08:38	05/10/16 15:29	1
Dibenzofuran	<1.7		1.7	0.22	ug/L		04/28/16 08:38	05/10/16 15:29	1
Diethyl phthalate	<1.7		1.7	0.30	ug/L		04/28/16 08:38	05/10/16 15:29	1
Dimethyl phthalate	<1.7		1.7	0.26	ug/L		04/28/16 08:38	05/10/16 15:29	1
Di-n-butyl phthalate	<4.2		4.2	0.61	ug/L		04/28/16 08:38	05/10/16 15:29	1
Di-n-octyl phthalate	<8.4		8.4	0.88	ug/L		04/28/16 08:38	05/10/16 15:29	1
Fluoranthene	<0.84		0.84	0.38	ug/L		04/28/16 08:38	05/10/16 15:29	1
Fluorene	<0.84		0.84	0.20	ug/L		04/28/16 08:38	05/10/16 15:29	1
Hexachlorobenzene	<0.42		0.42	0.067	ug/L		04/28/16 08:38	05/10/16 15:29	1
Hexachlorobutadiene	<4.2	* UJ	4.2	0.43	ug/L		04/28/16 08:38	05/10/16 15:29	1
Hexachlorocyclopentadiene	<17	* R	17	5.4	ug/L		04/28/16 08:38	05/10/16 15:29	1
Hexachloroethane	<4.2	* UJ	4.2	0.50	ug/L		04/28/16 08:38	05/10/16 15:29	1
Indeno[1,2,3-cd]pyrene	<0.17	* UJ	0.17	0.063	ug/L		04/28/16 08:38	05/10/16 15:29	1
Isophorone	<1.7		1.7	0.31	ug/L		04/28/16 08:38	05/10/16 15:29	1
Naphthalene	**2.4**		0.84	0.26	ug/L		04/28/16 08:38	05/10/16 15:29	1
Nitrobenzene	<0.84		0.84	0.38	ug/L		04/28/16 08:38	05/10/16 15:29	1
N-Nitrosodi-n-propylamine	<0.42		0.42	0.13	ug/L		04/28/16 08:38	05/10/16 15:29	1
N-Nitrosodiphenylamine	<0.84		0.84	0.31	ug/L		04/28/16 08:38	05/10/16 15:29	1
Pentachlorophenol	<17		17	3.3	ug/L		04/28/16 08:38	05/10/16 15:29	1
Phenanthrene	<0.84		0.84	0.25	ug/L		04/28/16 08:38	05/10/16 15:29	1
Phenol	**4.3**		4.2	0.56	ug/L		04/28/16 08:38	05/10/16 15:29	1
Pyrene	<0.84		0.84	0.36	ug/L		04/28/16 08:38	05/10/16 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*30 - 123*	*04/28/16 08:38*	*05/10/16 15:29*	*1*
2-Fluorophenol (Surr)	*72*		*30 - 110*	*04/28/16 08:38*	*05/10/16 15:29*	*1*
Nitrobenzene-d5 (Surr)	*75*		*33 - 139*	*04/28/16 08:38*	*05/10/16 15:29*	*1*
Phenol-d5 (Surr)	*62*		*20 - 100*	*04/28/16 08:38*	*05/10/16 15:29*	*1*
Terphenyl-d14 (Surr)	*120*		*42 - 150*	*04/28/16 08:38*	*05/10/16 15:29*	*1*
2,4,6-Tribromophenol (Surr)	*101*		*30 - 150*	*04/28/16 08:38*	*05/10/16 15:29*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.041		0.041	0.0054	ug/L		04/28/16 10:21	05/02/16 20:01	1
alpha-BHC	<0.041		0.041	0.0026	ug/L		04/28/16 10:21	05/02/16 20:01	1
alpha-Chlordane	<0.041		0.041	0.0045	ug/L		04/28/16 10:21	05/02/16 20:01	1
beta-BHC	<0.041		0.041	0.010	ug/L		04/28/16 10:21	05/02/16 20:01	1
4,4'-DDD	<0.041		0.041	0.014	ug/L		04/28/16 10:21	05/02/16 20:01	1
4,4'-DDE	<0.041		0.041	0.0039	ug/L		04/28/16 10:21	05/02/16 20:01	1
4,4'-DDT	<0.041		0.041	0.0033	ug/L		04/28/16 10:21	05/02/16 20:01	1
delta-BHC	<0.041		0.041	0.010	ug/L		04/28/16 10:21	05/02/16 20:01	1

Client Sample ID: MW-4-GW-04272016

Date Collected: 04/27/16 12:17
Date Received: 04/27/16 16:20

Lab Sample ID: 500-110798-2

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	<0.041		0.041	0.013	ug/L		04/28/16 10:21	05/02/16 20:01	1
Endosulfan I	<0.041		0.041	0.0042	ug/L		04/28/16 10:21	05/02/16 20:01	1
Endosulfan II	<0.041		0.041	0.0029	ug/L		04/28/16 10:21	05/02/16 20:01	1
Endosulfan sulfate	<0.041		0.041	0.012	ug/L		04/28/16 10:21	05/02/16 20:01	1
Endrin	<0.041		0.041	0.014	ug/L		04/28/16 10:21	05/02/16 20:01	1
Endrin aldehyde	<0.041		0.041	0.0084	ug/L		04/28/16 10:21	05/02/16 20:01	1
Endrin ketone	<0.041		0.041	0.017	ug/L		04/28/16 10:21	05/02/16 20:01	1
gamma-BHC (Lindane)	<0.041		0.041	0.0057	ug/L		04/28/16 10:21	05/02/16 20:01	1
gamma-Chlordane	<0.041		0.041	0.0073	ug/L		04/28/16 10:21	05/02/16 20:01	1
Heptachlor	<0.041		0.041	0.014	ug/L		04/28/16 10:21	05/02/16 20:01	1
Heptachlor epoxide	<0.041		0.041	0.014	ug/L		04/28/16 10:21	05/02/16 20:01	1
Methoxychlor	<0.081		0.081	0.023	ug/L		04/28/16 10:21	05/02/16 20:01	1
Toxaphene	<0.41		0.41	0.20	ug/L		04/28/16 10:21	05/02/16 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*46*		*30 - 143*	*04/28/16 10:21*	*05/02/16 20:01*	*1*
Tetrachloro-m-xylene	*146*	*X*	*30 - 120*	*04/28/16 10:21*	*05/02/16 20:01*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.41		0.41	0.068	ug/L		04/28/16 10:21	05/03/16 15:48	1
PCB-1016	<0.41		0.41	0.068	ug/L		04/28/16 10:21	05/03/16 15:48	1
PCB-1221	~~1.3~~		0.41	0.20	ug/L		04/28/16 10:21	05/03/16 15:48	1
PCB-1221	**0.93**		0.41	0.20	ug/L		04/28/16 10:21	05/03/16 15:48	1
PCB-1232	~~2.3~~		0.41	0.20	ug/L		04/28/16 10:21	05/03/16 15:48	1
PCB-1232	**1.8**		0.41	0.20	ug/L		04/28/16 10:21	05/03/16 15:48	1
PCB-1242	<0.41		0.41	0.20	ug/L		04/28/16 10:21	05/03/16 15:48	1
PCB-1242	<0.41		0.41	0.20	ug/L		04/28/16 10:21	05/03/16 15:48	1
PCB-1248	<0.41		0.41	0.20	ug/L		04/28/16 10:21	05/03/16 15:48	1
PCB-1248	<0.41		0.41	0.20	ug/L		04/28/16 10:21	05/03/16 15:48	1
PCB-1254	<0.41		0.41	0.20	ug/L		04/28/16 10:21	05/03/16 15:48	1
PCB-1254	<0.41		0.41	0.20	ug/L		04/28/16 10:21	05/03/16 15:48	1
PCB-1260	<0.41		0.41	0.071	ug/L		04/28/16 10:21	05/03/16 15:48	1
PCB-1260	<0.41		0.41	0.071	ug/L		04/28/16 10:21	05/03/16 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*30 - 127*	*04/28/16 10:21*	*05/03/16 15:48*	*1*
Tetrachloro-m-xylene	*62*		*30 - 127*	*04/28/16 10:21*	*05/03/16 15:48*	*1*
DCB Decachlorobiphenyl	*37*		*30 - 150*	*04/28/16 10:21*	*05/03/16 15:48*	*1*
DCB Decachlorobiphenyl	*39*		*30 - 150*	*04/28/16 10:21*	*05/03/16 15:48*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		04/28/16 08:11	04/28/16 21:40	1
Antimony	<0.020		0.020	0.0064	mg/L		04/28/16 08:11	04/28/16 21:40	1
Arsenic	**0.0066**	**J**	0.010	0.0031	mg/L		04/28/16 08:11	04/28/16 21:40	1
Barium	**0.063**		0.010	0.0022	mg/L		04/28/16 08:11	04/28/16 21:40	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		04/28/16 08:11	04/28/16 21:40	1
Cadmium	**0.0012**	**J**	0.0020	0.00094	mg/L		04/28/16 08:11	04/28/16 21:40	1
Calcium	**240**		0.20	0.059	mg/L		04/28/16 08:11	04/28/16 21:40	1

Client Sample ID: MW-4-GW-04272016

Date Collected: 04/27/16 12:17
Date Received: 04/27/16 16:20

Lab Sample ID: 500-110798-2

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.010		0.010	0.0024	mg/L		04/28/16 08:11	04/28/16 21:40	1
Cobalt	<0.0050		0.0050	0.00096	mg/L		04/28/16 08:11	04/28/16 21:40	1
Copper	<0.010		0.010	0.0022	mg/L		04/28/16 08:11	04/28/16 21:40	1
Iron	**1.1**		0.20	0.10	mg/L		04/28/16 08:11	04/28/16 21:40	1
Lead	**0.0026**	**J**	0.0050	0.0024	mg/L		04/28/16 08:11	04/28/16 21:40	1
Magnesium	**98**		0.10	0.034	mg/L		04/28/16 08:11	04/28/16 21:40	1
Manganese	**2.2**		0.010	0.0034	mg/L		04/28/16 08:11	04/28/16 21:40	1
Nickel	<0.010		0.010	0.0031	mg/L		04/28/16 08:11	04/28/16 21:40	1
Potassium	**13**		0.50	0.16	mg/L		04/28/16 08:11	04/28/16 21:40	1
Selenium	<0.010		0.010	0.0046	mg/L		04/28/16 08:11	04/28/16 21:40	1
Silver	<0.0050		0.0050	0.0013	mg/L		04/28/16 08:11	04/28/16 21:40	1
Sodium	**470**		1.0	0.43	mg/L		04/28/16 08:11	04/28/16 21:40	1
Thallium	<0.010		0.010	0.0028	mg/L		04/28/16 08:11	04/28/16 21:40	1
Vanadium	**0.0026**	**J**	0.0050	0.0019	mg/L		04/28/16 08:11	04/28/16 21:40	1
Zinc	<0.020		0.020	0.0090	mg/L		04/28/16 08:11	04/28/16 21:40	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		04/28/16 08:11	04/28/16 21:45	1
Antimony	<0.020		0.020	0.0064	mg/L		04/28/16 08:11	04/28/16 21:45	1
Arsenic	**0.0050**	**J**	0.010	0.0031	mg/L		04/28/16 08:11	04/28/16 21:45	1
Barium	**0.063**		0.010	0.0022	mg/L		04/28/16 08:11	04/28/16 21:45	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		04/28/16 08:11	04/28/16 21:45	1
Cadmium	**0.0012**	**J**	0.0020	0.00094	mg/L		04/28/16 08:11	04/28/16 21:45	1
Calcium	**240**		0.20	0.059	mg/L		04/28/16 08:11	04/28/16 21:45	1
Chromium	<0.010		0.010	0.0024	mg/L		04/28/16 08:11	04/28/16 21:45	1
Cobalt	<0.0050		0.0050	0.00096	mg/L		04/28/16 08:11	04/28/16 21:45	1
Copper	**0.0022**	**J**	0.010	0.0022	mg/L		04/28/16 08:11	04/28/16 21:45	1
Iron	**0.69**		0.20	0.10	mg/L		04/28/16 08:11	04/28/16 21:45	1
Lead	**0.0031**	**J**	0.0050	0.0024	mg/L		04/28/16 08:11	04/28/16 21:45	1
Magnesium	**97**		0.10	0.034	mg/L		04/28/16 08:11	04/28/16 21:45	1
Manganese	**2.2**		0.010	0.0034	mg/L		04/28/16 08:11	04/28/16 21:45	1
Nickel	**0.0037**	**J**	0.010	0.0031	mg/L		04/28/16 08:11	04/28/16 21:45	1
Potassium	**13**		0.50	0.16	mg/L		04/28/16 08:11	04/28/16 21:45	1
Selenium	<0.010		0.010	0.0046	mg/L		04/28/16 08:11	04/28/16 21:45	1
Silver	<0.0050		0.0050	0.0013	mg/L		04/28/16 08:11	04/28/16 21:45	1
Sodium	**460**		1.0	0.43	mg/L		04/28/16 08:11	04/28/16 21:45	1
Thallium	<0.010		0.010	0.0028	mg/L		04/28/16 08:11	04/28/16 21:45	1
Vanadium	**0.0022**	**J**	0.0050	0.0019	mg/L		04/28/16 08:11	04/28/16 21:45	1
Zinc	<0.020		0.020	0.0090	mg/L		04/28/16 08:11	04/28/16 21:45	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		04/29/16 16:00	05/02/16 11:49	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		04/29/16 16:00	05/02/16 11:51	1

Client Sample ID: MW-4-GW-04272016

Date Collected: 04/27/16 12:17
Date Received: 04/27/16 16:20

Lab Sample ID: 500-110798-2

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**3.2**		1.0	0.22	mg/L			05/03/16 05:18	1
Sulfate	**640**		130	50	mg/L			05/05/16 08:02	25
Total Organic Carbon - Duplicates	**100**		4.0	0.92	mg/L			05/08/16 16:22	4
Nitrogen, Nitrate	<0.10		0.10	0.045	mg/L			05/03/16 14:20	1
Total Suspended Solids	**7.0**		5.0	1.6	mg/L			04/29/16 10:28	1
Ammonia	**0.31**	~~B~~	0.20	0.043	mg/L		05/09/16 19:05	05/09/16 21:55	1
Nitrogen, Nitrite	< 0.020 ~~0.011 J B~~	UB	0.020	0.0032	mg/L			04/28/16 11:47	1
Nitrogen, Nitrate Nitrite	<0.10		0.10	0.045	mg/L			05/02/16 18:41	1

Client Sample ID: MW-5-GW-04272016

Date Collected: 04/27/16 14:30
Date Received: 04/27/16 16:20

Lab Sample ID: 500-110798-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0	0.38	ug/L			05/10/16 15:50	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.40	ug/L			05/10/16 15:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0	0.46	ug/L			05/10/16 15:50	1
1,1,2-Trichloroethane	<1.0		1.0	0.35	ug/L			05/10/16 15:50	1
1,1-Dichloroethane	<1.0		1.0	0.41	ug/L			05/10/16 15:50	1
1,1-Dichloroethene	<1.0		1.0	0.39	ug/L			05/10/16 15:50	1
1,2,4-Trichlorobenzene	<1.0		1.0	0.34	ug/L			05/10/16 15:50	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0	2.0	ug/L			05/10/16 15:50	1
1,2-Dibromoethane	<1.0		1.0	0.39	ug/L			05/10/16 15:50	1
1,2-Dichlorobenzene	<1.0		1.0	0.33	ug/L			05/10/16 15:50	1
1,2-Dichloroethane	<1.0		1.0	0.39	ug/L			05/10/16 15:50	1
1,2-Dichloropropane	<1.0		1.0	0.43	ug/L			05/10/16 15:50	1
1,3-Dichlorobenzene	<1.0		1.0	0.40	ug/L			05/10/16 15:50	1
1,4-Dichlorobenzene	**4.0**		1.0	0.36	ug/L			05/10/16 15:50	1
2-Hexanone	<5.0	UJ	5.0	1.6	ug/L			05/10/16 15:50	1
Acetone	<5.0		5.0	1.7	ug/L			05/10/16 15:50	1
Benzene	<0.50		0.50	0.15	ug/L			05/10/16 15:50	1
Bromodichloromethane	<1.0		1.0	0.37	ug/L			05/10/16 15:50	1
Bromoform	<1.0		1.0	0.48	ug/L			05/10/16 15:50	1
Bromomethane	<2.0		2.0	0.80	ug/L			05/10/16 15:50	1
Carbon disulfide	<2.0		2.0	0.45	ug/L			05/10/16 15:50	1
Carbon tetrachloride	<1.0		1.0	0.38	ug/L			05/10/16 15:50	1
Chlorobenzene	**4.6**		1.0	0.39	ug/L			05/10/16 15:50	1
Chloroethane	<1.0		1.0	0.51	ug/L			05/10/16 15:50	1
Chloroform	<1.0		1.0	0.37	ug/L			05/10/16 15:50	1
Chloromethane	<1.0		1.0	0.32	ug/L			05/10/16 15:50	1
cis-1,2-Dichloroethene	<1.0		1.0	0.41	ug/L			05/10/16 15:50	1
cis-1,3-Dichloropropene	<1.0		1.0	0.42	ug/L			05/10/16 15:50	1
Cyclohexane	**1.4**		1.0	0.49	ug/L			05/10/16 15:50	1
Dibromochloromethane	<1.0		1.0	0.49	ug/L			05/10/16 15:50	1
Dichlorodifluoromethane	<2.0		2.0	0.67	ug/L			05/10/16 15:50	1
Ethylbenzene	<0.50		0.50	0.18	ug/L			05/10/16 15:50	1
Isopropylbenzene	**36**		1.0	0.39	ug/L			05/10/16 15:50	1
Methyl acetate	<5.0	UJ	5.0	2.0	ug/L			05/10/16 15:50	1
Methyl Ethyl Ketone	<5.0	UJ	5.0	2.1	ug/L			05/10/16 15:50	1
methyl isobutyl ketone	<5.0	UJ	5.0	2.2	ug/L			05/10/16 15:50	1
Methyl tert-butyl ether	<1.0		1.0	0.39	ug/L			05/10/16 15:50	1
Methylcyclohexane	<1.0		1.0	0.32	ug/L			05/10/16 15:50	1
Methylene Chloride	<5.0		5.0	1.6	ug/L			05/10/16 15:50	1
Styrene	<1.0		1.0	0.39	ug/L			05/10/16 15:50	1
Tetrachloroethene	<1.0		1.0	0.37	ug/L			05/10/16 15:50	1
Toluene	<0.50		0.50	0.15	ug/L			05/10/16 15:50	1
trans-1,2-Dichloroethene	<1.0		1.0	0.35	ug/L			05/10/16 15:50	1
trans-1,3-Dichloropropene	<1.0		1.0	0.36	ug/L			05/10/16 15:50	1
Trichloroethene	<0.50		0.50	0.16	ug/L			05/10/16 15:50	1
Trichlorofluoromethane	<1.0		1.0	0.43	ug/L			05/10/16 15:50	1
Vinyl chloride	<0.50		0.50	0.20	ug/L			05/10/16 15:50	1
Xylenes, Total	**0.73**	**J**	1.0	0.22	ug/L			05/10/16 15:50	1

Client Sample ID: MW-5-GW-04272016

Date Collected: 04/27/16 14:30
Date Received: 04/27/16 16:20

Lab Sample ID: 500-110798-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*71 - 127*		*05/10/16 15:50*	*1*
4-Bromofluorobenzene (Surr)	*84*		*71 - 120*		*05/10/16 15:50*	*1*
Dibromofluoromethane	*110*		*70 - 120*		*05/10/16 15:50*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*05/10/16 15:50*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	<4.0		4.0	0.29	ug/L		04/28/16 08:38	05/10/16 15:54	1
2,2'-oxybis[1-chloropropane]	<1.6		1.6	0.31	ug/L		04/28/16 08:38	05/10/16 15:54	1
2,4,5-Trichlorophenol	<8.1		8.1	2.1	ug/L		04/28/16 08:38	05/10/16 15:54	1
2,4,6-Trichlorophenol	<4.0		4.0	0.58	ug/L		04/28/16 08:38	05/10/16 15:54	1
2,4-Dichlorophenol	<8.1		8.1	2.1	ug/L		04/28/16 08:38	05/10/16 15:54	1
2,4-Dimethylphenol	<8.1		8.1	1.5	ug/L		04/28/16 08:38	05/10/16 15:54	1
2,4-Dinitrophenol	<16		16	7.0	ug/L		04/28/16 08:38	05/10/16 15:54	1
2,4-Dinitrotoluene	<0.81		0.81	0.20	ug/L		04/28/16 08:38	05/10/16 15:54	1
2,6-Dinitrotoluene	<0.40		0.40	0.060	ug/L		04/28/16 08:38	05/10/16 15:54	1
2-Chloronaphthalene	<1.6		1.6	0.19	ug/L		04/28/16 08:38	05/10/16 15:54	1
2-Chlorophenol	<4.0		4.0	0.45	ug/L		04/28/16 08:38	05/10/16 15:54	1
2-Methylnaphthalene	**0.64**		0.40	0.053	ug/L		04/28/16 08:38	05/10/16 15:54	1
2-Methylphenol	<1.6		1.6	0.25	ug/L		04/28/16 08:38	05/10/16 15:54	1
2-Nitroaniline	<4.0		4.0	1.0	ug/L		04/28/16 08:38	05/10/16 15:54	1
2-Nitrophenol	<8.1		8.1	2.0	ug/L		04/28/16 08:38	05/10/16 15:54	1
3 & 4 Methylphenol	<1.6		1.6	0.36	ug/L		04/28/16 08:38	05/10/16 15:54	1
3,3'-Dichlorobenzidine	<4.0		4.0	1.4	ug/L		04/28/16 08:38	05/10/16 15:54	1
3-Nitroaniline	<8.1		8.1	1.4	ug/L		04/28/16 08:38	05/10/16 15:54	1
4,6-Dinitro-2-methylphenol	<16		16	4.8	ug/L		04/28/16 08:38	05/10/16 15:54	1
4-Bromophenyl phenyl ether	<4.0		4.0	0.44	ug/L		04/28/16 08:38	05/10/16 15:54	1
4-Chloro-3-methylphenol	<8.1		8.1	1.9	ug/L		04/28/16 08:38	05/10/16 15:54	1
4-Chloroaniline	<8.1		8.1	1.6	ug/L		04/28/16 08:38	05/10/16 15:54	1
4-Chlorophenyl phenyl ether	<4.0		4.0	0.51	ug/L		04/28/16 08:38	05/10/16 15:54	1
4-Nitroaniline	<8.1		8.1	1.3	ug/L		04/28/16 08:38	05/10/16 15:54	1
4-Nitrophenol	<16		16	6.0	ug/L		04/28/16 08:38	05/10/16 15:54	1
Acenaphthene	**0.31**	**J**	0.81	0.25	ug/L		04/28/16 08:38	05/10/16 15:54	1
Acenaphthylene	<0.81		0.81	0.22	ug/L		04/28/16 08:38	05/10/16 15:54	1
Acetophenone	<4.0		4.0	0.54	ug/L		04/28/16 08:38	05/10/16 15:54	1
Anthracene	<0.81		0.81	0.27	ug/L		04/28/16 08:38	05/10/16 15:54	1
Atrazine	<4.0		4.0	0.51	ug/L		04/28/16 08:38	05/10/16 15:54	1
Benzaldehyde	<16	^ UJ	16	12	ug/L		04/28/16 08:38	05/10/16 15:54	1
Benzo[a]anthracene	<0.16		0.16	0.046	ug/L		04/28/16 08:38	05/10/16 15:54	1
Benzo[a]pyrene	<0.16		0.16	0.080	ug/L		04/28/16 08:38	05/10/16 15:54	1
Benzo[b]fluoranthene	<0.16		0.16	0.065	ug/L		04/28/16 08:38	05/10/16 15:54	1
Benzo[g,h,i]perylene	<0.81		0.81	0.30	ug/L		04/28/16 08:38	05/10/16 15:54	1
Benzo[k]fluoranthene	<0.16		0.16	0.052	ug/L		04/28/16 08:38	05/10/16 15:54	1
Bis(2-chloroethoxy)methane	<1.6		1.6	0.23	ug/L		04/28/16 08:38	05/10/16 15:54	1
Bis(2-chloroethyl)ether	<1.6		1.6	0.24	ug/L		04/28/16 08:38	05/10/16 15:54	1
Bis(2-ethylhexyl) phthalate	<8.1		8.1	1.4	ug/L		04/28/16 08:38	05/10/16 15:54	1
Butyl benzyl phthalate	<1.6		1.6	0.39	ug/L		04/28/16 08:38	05/10/16 15:54	1
Caprolactam	<8.1		8.1	1.2	ug/L		04/28/16 08:38	05/10/16 15:54	1
Carbazole	<4.0		4.0	0.29	ug/L		04/28/16 08:38	05/10/16 15:54	1
Chrysene	<0.40		0.40	0.055	ug/L		04/28/16 08:38	05/10/16 15:54	1

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Lab Sample ID: 500-110798-3

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	<0.24		0.24	0.041	ug/L		04/28/16 08:38	05/10/16 15:54	1
Dibenzofuran	<1.6		1.6	0.21	ug/L		04/28/16 08:38	05/10/16 15:54	1
Diethyl phthalate	<1.6		1.6	0.29	ug/L		04/28/16 08:38	05/10/16 15:54	1
Dimethyl phthalate	<1.6		1.6	0.25	ug/L		04/28/16 08:38	05/10/16 15:54	1
Di-n-butyl phthalate	<4.0		4.0	0.59	ug/L		04/28/16 08:38	05/10/16 15:54	1
Di-n-octyl phthalate	<8.1		8.1	0.85	ug/L		04/28/16 08:38	05/10/16 15:54	1
Fluoranthene	<0.81		0.81	0.37	ug/L		04/28/16 08:38	05/10/16 15:54	1
Fluorene	**0.20**	**J**	0.81	0.20	ug/L		04/28/16 08:38	05/10/16 15:54	1
Hexachlorobenzene	<0.40		0.40	0.064	ug/L		04/28/16 08:38	05/10/16 15:54	1
Hexachlorobutadiene	<4.0	* UJ	4.0	0.42	ug/L		04/28/16 08:38	05/10/16 15:54	1
Hexachlorocyclopentadiene	<16	* R	16	5.2	ug/L		04/28/16 08:38	05/10/16 15:54	1
Hexachloroethane	<4.0	* UJ	4.0	0.48	ug/L		04/28/16 08:38	05/10/16 15:54	1
Indeno[1,2,3-cd]pyrene	<0.16		0.16	0.061	ug/L		04/28/16 08:38	05/10/16 15:54	1
Isophorone	<1.6		1.6	0.30	ug/L		04/28/16 08:38	05/10/16 15:54	1
Naphthalene	**0.64**	**J**	0.81	0.25	ug/L		04/28/16 08:38	05/10/16 15:54	1
Nitrobenzene	<0.81		0.81	0.36	ug/L		04/28/16 08:38	05/10/16 15:54	1
N-Nitrosodi-n-propylamine	<0.40		0.40	0.12	ug/L		04/28/16 08:38	05/10/16 15:54	1
N-Nitrosodiphenylamine	**1.2**		0.81	0.30	ug/L		04/28/16 08:38	05/10/16 15:54	1
Pentachlorophenol	<16		16	3.2	ug/L		04/28/16 08:38	05/10/16 15:54	1
Phenanthrene	<0.81		0.81	0.24	ug/L		04/28/16 08:38	05/10/16 15:54	1
Phenol	<4.0		4.0	0.54	ug/L		04/28/16 08:38	05/10/16 15:54	1
Pyrene	<0.81		0.81	0.35	ug/L		04/28/16 08:38	05/10/16 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*30 - 123*	*04/28/16 08:38*	*05/10/16 15:54*	*1*
2-Fluorophenol (Surr)	*72*		*30 - 110*	*04/28/16 08:38*	*05/10/16 15:54*	*1*
Nitrobenzene-d5 (Surr)	*80*		*33 - 139*	*04/28/16 08:38*	*05/10/16 15:54*	*1*
Phenol-d5 (Surr)	*58*		*20 - 100*	*04/28/16 08:38*	*05/10/16 15:54*	*1*
Terphenyl-d14 (Surr)	*112*		*42 - 150*	*04/28/16 08:38*	*05/10/16 15:54*	*1*
2,4,6-Tribromophenol (Surr)	*110*		*30 - 150*	*04/28/16 08:38*	*05/10/16 15:54*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.040		0.040	0.0053	ug/L		04/28/16 10:21	05/02/16 20:20	1
alpha-BHC	<0.040		0.040	0.0026	ug/L		04/28/16 10:21	05/02/16 20:20	1
alpha-Chlordane	<0.040		0.040	0.0044	ug/L		04/28/16 10:21	05/02/16 20:20	1
beta-BHC	<0.040		0.040	0.010	ug/L		04/28/16 10:21	05/02/16 20:20	1
4,4'-DDD	<0.040		0.040	0.013	ug/L		04/28/16 10:21	05/02/16 20:20	1
4,4'-DDE	<0.040		0.040	0.0038	ug/L		04/28/16 10:21	05/02/16 20:20	1
4,4'-DDT	<0.040		0.040	0.0032	ug/L		04/28/16 10:21	05/02/16 20:20	1
delta-BHC	<0.040		0.040	0.010	ug/L		04/28/16 10:21	05/02/16 20:20	1
Dieldrin	<0.040		0.040	0.013	ug/L		04/28/16 10:21	05/02/16 20:20	1
Endosulfan I	<0.040		0.040	0.0041	ug/L		04/28/16 10:21	05/02/16 20:20	1
Endosulfan II	<0.040		0.040	0.0028	ug/L		04/28/16 10:21	05/02/16 20:20	1
Endosulfan sulfate	<0.040		0.040	0.012	ug/L		04/28/16 10:21	05/02/16 20:20	1
Endrin	<0.040		0.040	0.014	ug/L		04/28/16 10:21	05/02/16 20:20	1
Endrin aldehyde	<0.040		0.040	0.0081	ug/L		04/28/16 10:21	05/02/16 20:20	1
Endrin ketone	<0.040		0.040	0.017	ug/L		04/28/16 10:21	05/02/16 20:20	1
gamma-BHC (Lindane)	<0.040		0.040	0.0056	ug/L		04/28/16 10:21	05/02/16 20:20	1
gamma-Chlordane	<0.040		0.040	0.0071	ug/L		04/28/16 10:21	05/02/16 20:20	1

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Lab Sample ID: 500-110798-3

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	<0.040		0.040	0.013	ug/L		04/28/16 10:21	05/02/16 20:20	1
Heptachlor epoxide	<0.040		0.040	0.014	ug/L		04/28/16 10:21	05/02/16 20:20	1
Methoxychlor	<0.079		0.079	0.023	ug/L		04/28/16 10:21	05/02/16 20:20	1
Toxaphene	<0.40		0.40	0.20	ug/L		04/28/16 10:21	05/02/16 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*44*		*30 - 143*	*04/28/16 10:21*	*05/02/16 20:20*	*1*
Tetrachloro-m-xylene	*76*		*30 - 120*	*04/28/16 10:21*	*05/02/16 20:20*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.40		0.40	0.066	ug/L		04/28/16 10:21	05/03/16 16:03	1
PCB-1221	<0.40		0.40	0.20	ug/L		04/28/16 10:21	05/03/16 16:03	1
PCB-1232	<0.40		0.40	0.20	ug/L		04/28/16 10:21	05/03/16 16:03	1
PCB-1242	<0.40		0.40	0.20	ug/L		04/28/16 10:21	05/03/16 16:03	1
PCB-1248	<0.40		0.40	0.20	ug/L		04/28/16 10:21	05/03/16 16:03	1
PCB-1254	<0.40		0.40	0.20	ug/L		04/28/16 10:21	05/03/16 16:03	1
PCB-1260	<0.40		0.40	0.069	ug/L		04/28/16 10:21	05/03/16 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*30 - 127*	*04/28/16 10:21*	*05/03/16 16:03*	*1*
DCB Decachlorobiphenyl	*54*		*30 - 150*	*04/28/16 10:21*	*05/03/16 16:03*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		04/28/16 08:11	04/28/16 21:50	1
Antimony	<0.020		0.020	0.0064	mg/L		04/28/16 08:11	04/28/16 21:50	1
Arsenic	<0.010		0.010	0.0031	mg/L		04/28/16 08:11	04/28/16 21:50	1
Barium	**0.96**		0.010	0.0022	mg/L		04/28/16 08:11	04/28/16 21:50	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		04/28/16 08:11	04/28/16 21:50	1
Cadmium	**0.00094**	**J**	0.0020	0.00094	mg/L		04/28/16 08:11	04/28/16 21:50	1
Calcium	**88**		0.20	0.059	mg/L		04/28/16 08:11	04/28/16 21:50	1
Chromium	<0.010		0.010	0.0024	mg/L		04/28/16 08:11	04/28/16 21:50	1
Cobalt	<0.0050		0.0050	0.00096	mg/L		04/28/16 08:11	04/28/16 21:50	1
Copper	<0.010		0.010	0.0022	mg/L		04/28/16 08:11	04/28/16 21:50	1
Iron	**28**		0.20	0.10	mg/L		04/28/16 08:11	04/28/16 21:50	1
Lead	<0.0050		0.0050	0.0024	mg/L		04/28/16 08:11	04/28/16 21:50	1
Magnesium	**110**		0.10	0.034	mg/L		04/28/16 08:11	04/28/16 21:50	1
Manganese	**0.097**		0.010	0.0034	mg/L		04/28/16 08:11	04/28/16 21:50	1
Nickel	**0.0043**	**J**	0.010	0.0031	mg/L		04/28/16 08:11	04/28/16 21:50	1
Potassium	**47**		0.50	0.16	mg/L		04/28/16 08:11	04/28/16 21:50	1
Selenium	<0.010		0.010	0.0046	mg/L		04/28/16 08:11	04/28/16 21:50	1
Silver	<0.0050		0.0050	0.0013	mg/L		04/28/16 08:11	04/28/16 21:50	1
Sodium	**170**		1.0	0.43	mg/L		04/28/16 08:11	04/28/16 21:50	1
Thallium	<0.010		0.010	0.0028	mg/L		04/28/16 08:11	04/28/16 21:50	1
Vanadium	<0.0050		0.0050	0.0019	mg/L		04/28/16 08:11	04/28/16 21:50	1
Zinc	<0.020		0.020	0.0090	mg/L		04/28/16 08:11	04/28/16 21:50	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		04/28/16 08:11	04/28/16 20:01	1

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Lab Sample ID: 500-110798-3

Matrix: Water

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.020		0.020	0.0064	mg/L		04/28/16 08:11	04/28/16 20:01	1
Arsenic	<0.010		0.010	0.0031	mg/L		04/28/16 08:11	04/28/16 20:01	1
Barium	**0.91**		0.010	0.0022	mg/L		04/28/16 08:11	04/28/16 20:01	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		04/28/16 08:11	04/28/16 20:01	1
Cadmium	<0.0020		0.0020	0.00094	mg/L		04/28/16 08:11	04/28/16 20:01	1
Calcium	**82**		0.20	0.059	mg/L		04/28/16 08:11	04/28/16 20:01	1
Chromium	<0.010		0.010	0.0024	mg/L		04/28/16 08:11	04/28/16 20:01	1
Cobalt	<0.0050		0.0050	0.00096	mg/L		04/28/16 08:11	04/28/16 20:01	1
Copper	<0.010		0.010	0.0022	mg/L		04/28/16 08:11	04/28/16 20:01	1
Iron	**26**		0.20	0.10	mg/L		04/28/16 08:11	04/28/16 20:01	1
Lead	<0.0050		0.0050	0.0024	mg/L		04/28/16 08:11	04/28/16 20:01	1
Magnesium	**110**		0.10	0.034	mg/L		04/28/16 08:11	04/28/16 20:01	1
Manganese	**0.093**		0.010	0.0034	mg/L		04/28/16 08:11	04/28/16 20:01	1
Nickel	**0.0040**	J	0.010	0.0031	mg/L		04/28/16 08:11	04/28/16 20:01	1
Potassium	**45**		0.50	0.16	mg/L		04/28/16 08:11	04/28/16 20:01	1
Selenium	<0.010		0.010	0.0046	mg/L		04/28/16 08:11	04/28/16 20:01	1
Silver	<0.0050		0.0050	0.0013	mg/L		04/28/16 08:11	04/28/16 20:01	1
Sodium	**170**		1.0	0.43	mg/L		04/28/16 08:11	04/28/16 20:01	1
Thallium	<0.010		0.010	0.0028	mg/L		04/28/16 08:11	04/28/16 20:01	1
Vanadium	<0.0050		0.0050	0.0019	mg/L		04/28/16 08:11	04/28/16 20:01	1
Zinc	<0.020		0.020	0.0090	mg/L		04/28/16 08:11	04/28/16 20:01	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		04/29/16 16:00	05/02/16 11:53	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		04/29/16 16:00	05/02/16 11:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<1.0		1.0	0.22	mg/L			05/03/16 05:21	1
Sulfate	<5.0		5.0	2.0	mg/L			05/06/16 09:07	1
Total Organic Carbon - Duplicates	**18**		1.0	0.23	mg/L			05/08/16 16:43	1
Nitrogen, Nitrate	<0.10		0.10	0.045	mg/L			05/03/16 14:20	1
Total Suspended Solids	**72**		5.0	1.6	mg/L			04/29/16 10:29	1
Ammonia	**57**	~~B~~	4.0	0.86	mg/L		05/09/16 19:05	05/09/16 21:57	20
Nitrogen, Nitrite	< 0.020 ~~0.010 J B~~ UB		0.020	0.0032	mg/L			04/28/16 11:48	1
Nitrogen, Nitrate Nitrite	<0.10		0.10	0.045	mg/L			05/02/16 18:44	1

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #: 500-110872

Send Results to:

Contact & Company Name: Arcadis
Telephone: 312 575 3772
Address: 120 S. LaSalle St. Suite 1350
Fax:
City: Chicago State: IL Zip: 60603
E-mail Address: ellyn.gates@arcadis.com
Project Name/Location (City, State): LCCS Chicago, IL
Project #: CI001805.0002.00005
Sampler's Printed Name: Nicholas Ickes
Sampler's Signature:

Preservative	E	E	C	C	A	A	
Filtered (✓)				✓			
# of Containers	6		1	1	1		9
Container Information							

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: _____

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	8270D (MOD) List 4.2	8082A	9081B	7470A Mercury 6010C TAL Metals -Hg	7470A Mercury (6010C TAL Metals -Hg (Dissolved)	SM4500NH3-G Ammonia	SM4500-NO2-B Nitrogen, Nitrite	See "Special Instructions"
1 MW-1-GW-04282016	4-28-16	0822		✓	W	X	X	X	X	X	X	X	
2 MW-13-GW-04282016	4-28-16	1022		✓	W	X	X	X	X	X	X	X	
3 MW-12-GW-04282016	4-28-16	1240		✓	W	X	X	X	X	X	X	X	
4 MW-11-GW-04282016	4-28-16	1422		✓	W	X	X	X	X	X	X	X	
5 DUP-1 (04282016)	4-28-16	—		✓	W	X	X	X	X	X	X	X	

REMARKS

500-110872 COC

Special Instructions/Comments: 9034_Calc-Sulfide; 8260B-Target Compound List 4.2; 9060A-(MOD) Local Method; SM4500_NO2_B-Nitrogen, Nitrite; 9038-Sulfate; 2540D-Total Suspended Solids

☐ Special QA/QC Instructions(✓):

* Level III Data Package

Laboratory Information and Receipt

Lab Name:
☐ Cooler packed with ice (✓)
Specify Turnaround Requirements:
Shipping Tracking #:
Cooler Custody Seal (✓): ☒ Intact ☐ Not Intact
Sample Receipt:
Condition/Cooler Temp: 0.8, 1.8

Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name: Nicholas Ickes	Printed Name: David Becker	Printed Name: David Becker	Printed Name: Anel Sanchez
Signature:	Signature: David Becker	Signature: David Becker	Signature: Anel Sanchez
Firm: Arcadis	Firm/Courier: TA	Firm/Courier: TA	Firm: TA-CHI
Date/Time: 4-28-16 1520	Date/Time: 4-28-16 15:20	Date/Time: 4-28-16 16:05	Date/Time: 04/28/16 16:05

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results; YELLOW – Lab copy; PINK – Retained by Arcadis

Client Sample ID: MW-1-GW-04282016

Date Collected: 04/28/16 08:22
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**94**	J	5.0	1.7	ug/L			05/11/16 10:58	1
Benzene	**25**	J	0.50	0.15	ug/L			05/11/16 10:58	1
Bromodichloromethane	<1.0	UJ	1.0	0.37	ug/L			05/11/16 10:58	1
Bromoform	<1.0	UJ	1.0	0.48	ug/L			05/11/16 10:58	1
Bromomethane	<2.0	UJ	2.0	0.80	ug/L			05/11/16 10:58	1
Carbon disulfide	<2.0	UJ	2.0	0.45	ug/L			05/11/16 10:58	1
Carbon tetrachloride	<1.0	UJ	1.0	0.38	ug/L			05/11/16 10:58	1
Chlorobenzene	**4.1**	J	1.0	0.39	ug/L			05/11/16 10:58	1
Chloroethane	<1.0	UJ	1.0	0.51	ug/L			05/11/16 10:58	1
Chloroform	<1.0	UJ	1.0	0.37	ug/L			05/11/16 10:58	1
Chloromethane	<1.0	UJ	1.0	0.32	ug/L			05/11/16 10:58	1
cis-1,2-Dichloroethene	<1.0	UJ	1.0	0.41	ug/L			05/11/16 10:58	1
cis-1,3-Dichloropropene	<1.0	UJ	1.0	0.42	ug/L			05/11/16 10:58	1
Cyclohexane	**1.1**	J	1.0	0.49	ug/L			05/11/16 10:58	1
Dibromochloromethane	<1.0	UJ	1.0	0.49	ug/L			05/11/16 10:58	1
1,2-Dibromo-3-Chloropropane	<5.0	UJ	5.0	2.0	ug/L			05/11/16 10:58	1
1,2-Dibromoethane	<1.0	UJ	1.0	0.39	ug/L			05/11/16 10:58	1
1,2-Dichlorobenzene	**1.1**	J	1.0	0.33	ug/L			05/11/16 10:58	1
1,3-Dichlorobenzene	<1.0	UJ	1.0	0.40	ug/L			05/11/16 10:58	1
1,4-Dichlorobenzene	**2.1**	J	1.0	0.36	ug/L			05/11/16 10:58	1
Dichlorodifluoromethane	<2.0	UJ	2.0	0.67	ug/L			05/11/16 10:58	1
1,1-Dichloroethane	<1.0	UJ	1.0	0.41	ug/L			05/11/16 10:58	1
1,2-Dichloroethane	<1.0	UJ	1.0	0.39	ug/L			05/11/16 10:58	1
1,1-Dichloroethene	<1.0	UJ	1.0	0.39	ug/L			05/11/16 10:58	1
1,2-Dichloropropane	<1.0	UJ	1.0	0.43	ug/L			05/11/16 10:58	1
Ethylbenzene	**10**	J	0.50	0.18	ug/L			05/11/16 10:58	1
2-Hexanone	<5.0	UJ	5.0	1.6	ug/L			05/11/16 10:58	1
Isopropylbenzene	**7.3**	J	1.0	0.39	ug/L			05/11/16 10:58	1
Methyl acetate	<5.0	UJ	5.0	2.0	ug/L			05/11/16 10:58	1
Methylcyclohexane	<1.0	UJ	1.0	0.32	ug/L			05/11/16 10:58	1
Methylene Chloride	<5.0	UJ	5.0	1.6	ug/L			05/11/16 10:58	1
Methyl Ethyl Ketone	**48**	J	5.0	2.1	ug/L			05/11/16 10:58	1
methyl isobutyl ketone	**57**	J	5.0	2.2	ug/L			05/11/16 10:58	1
Methyl tert-butyl ether	<1.0	UJ	1.0	0.39	ug/L			05/11/16 10:58	1
Styrene	<1.0	UJ	1.0	0.39	ug/L			05/11/16 10:58	1
1,1,2,2-Tetrachloroethane	<1.0	UJ	1.0	0.40	ug/L			05/11/16 10:58	1
Tetrachloroethene	<1.0	UJ	1.0	0.37	ug/L			05/11/16 10:58	1
Toluene	**4.6**	J	0.50	0.15	ug/L			05/11/16 10:58	1
trans-1,2-Dichloroethene	<1.0	UJ	1.0	0.35	ug/L			05/11/16 10:58	1
trans-1,3-Dichloropropene	<1.0		1.0	0.36	ug/L			05/11/16 10:58	1
1,2,4-Trichlorobenzene	<1.0		1.0	0.34	ug/L			05/11/16 10:58	1
1,1,1-Trichloroethane	<1.0		1.0	0.38	ug/L			05/11/16 10:58	1
1,1,2-Trichloroethane	<1.0		1.0	0.35	ug/L			05/11/16 10:58	1
Trichloroethene	<0.50		0.50	0.16	ug/L			05/11/16 10:58	1
Trichlorofluoromethane	<1.0		1.0	0.43	ug/L			05/11/16 10:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0	0.46	ug/L			05/11/16 10:58	1
Vinyl chloride	<0.50		0.50	0.20	ug/L			05/11/16 10:58	1
Xylenes, Total	**12**	J	1.0	0.22	ug/L			05/11/16 10:58	1

Client Sample ID: MW-1-GW-04282016

Date Collected: 04/28/16 08:22
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-1

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*85*		*71 - 120*		*05/11/16 10:58*	*1*
Dibromofluoromethane	*39*	*X*	*70 - 120*		*05/11/16 10:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*71 - 127*		*05/11/16 10:58*	*1*
Toluene-d8 (Surr)	*79*		*75 - 120*		*05/11/16 10:58*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**7.4**		0.82	0.25	ug/L		05/03/16 09:31	05/06/16 00:42	1
Acenaphthylene	<0.82		0.82	0.22	ug/L		05/03/16 09:31	05/06/16 00:42	1
Acetophenone	**1.3**	**J**	4.1	0.54	ug/L		05/03/16 09:31	05/06/16 00:42	1
Anthracene	<0.82		0.82	0.27	ug/L		05/03/16 09:31	05/06/16 00:42	1
Benzo[a]anthracene	<0.16		0.16	0.046	ug/L		05/03/16 09:31	05/06/16 00:42	1
Benzo[a]pyrene	<0.16		0.16	0.081	ug/L		05/03/16 09:31	05/06/16 00:42	1
Benzo[b]fluoranthene	<0.16		0.16	0.066	ug/L		05/03/16 09:31	05/06/16 00:42	1
Benzo[g,h,i]perylene	<0.82		0.82	0.31	ug/L		05/03/16 09:31	05/06/16 00:42	1
Benzo[k]fluoranthene	<0.16		0.16	0.052	ug/L		05/03/16 09:31	05/06/16 00:42	1
Bis(2-chloroethoxy)methane	<1.6		1.6	0.23	ug/L		05/03/16 09:31	05/06/16 00:42	1
Bis(2-chloroethyl)ether	<1.6		1.6	0.24	ug/L		05/03/16 09:31	05/06/16 00:42	1
Bis(2-ethylhexyl) phthalate	<8.2		8.2	1.4	ug/L		05/03/16 09:31	05/06/16 00:42	1
4-Bromophenyl phenyl ether	<4.1		4.1	0.44	ug/L		05/03/16 09:31	05/06/16 00:42	1
Butyl benzyl phthalate	<1.6		1.6	0.39	ug/L		05/03/16 09:31	05/06/16 00:42	1
Carbazole	**6.6**		4.1	0.29	ug/L		05/03/16 09:31	05/06/16 00:42	1
4-Chloroaniline	**4.1**	**J**	8.2	1.7	ug/L		05/03/16 09:31	05/06/16 00:42	1
4-Chloro-3-methylphenol	<8.2		8.2	1.9	ug/L		05/03/16 09:31	05/06/16 00:42	1
2-Chloronaphthalene	<1.6		1.6	0.19	ug/L		05/03/16 09:31	05/06/16 00:42	1
2-Chlorophenol	<4.1		4.1	0.46	ug/L		05/03/16 09:31	05/06/16 00:42	1
4-Chlorophenyl phenyl ether	<4.1		4.1	0.52	ug/L		05/03/16 09:31	05/06/16 00:42	1
Chrysene	<0.41		0.41	0.056	ug/L		05/03/16 09:31	05/06/16 00:42	1
Dibenz(a,h)anthracene	<0.25		0.25	0.042	ug/L		05/03/16 09:31	05/06/16 00:42	1
Dibenzofuran	**1.1**	**J**	1.6	0.22	ug/L		05/03/16 09:31	05/06/16 00:42	1
3,3'-Dichlorobenzidine	<4.1		4.1	1.4	ug/L		05/03/16 09:31	05/06/16 00:42	1
2,4-Dichlorophenol	<8.2		8.2	2.1	ug/L		05/03/16 09:31	05/06/16 00:42	1
Diethyl phthalate	<1.6		1.6	0.30	ug/L		05/03/16 09:31	05/06/16 00:42	1
2,4-Dimethylphenol	**4.4**	**J**	8.2	1.5	ug/L		05/03/16 09:31	05/06/16 00:42	1
Dimethyl phthalate	<1.6		1.6	0.26	ug/L		05/03/16 09:31	05/06/16 00:42	1
Di-n-butyl phthalate	<4.1		4.1	0.60	ug/L		05/03/16 09:31	05/06/16 00:42	1
4,6-Dinitro-2-methylphenol	<16		16	4.8	ug/L		05/03/16 09:31	05/06/16 00:42	1
2,4-Dinitrophenol	<16		16	7.0	ug/L		05/03/16 09:31	05/06/16 00:42	1
2,4-Dinitrotoluene	<0.82		0.82	0.20	ug/L		05/03/16 09:31	05/06/16 00:42	1
2,6-Dinitrotoluene	<0.41		0.41	0.060	ug/L		05/03/16 09:31	05/06/16 00:42	1
Di-n-octyl phthalate	<8.2		8.2	0.86	ug/L		05/03/16 09:31	05/06/16 00:42	1
Fluoranthene	<0.82		0.82	0.37	ug/L		05/03/16 09:31	05/06/16 00:42	1
Fluorene	**2.1**		0.82	0.20	ug/L		05/03/16 09:31	05/06/16 00:42	1
Hexachlorobenzene	<0.41		0.41	0.065	ug/L		05/03/16 09:31	05/06/16 00:42	1
Hexachlorobutadiene	<4.1		4.1	0.42	ug/L		05/03/16 09:31	05/06/16 00:42	1
Hexachlorocyclopentadiene	<16	UJ	16	5.2	ug/L		05/03/16 09:31	05/06/16 00:42	1
Hexachloroethane	<4.1		4.1	0.49	ug/L		05/03/16 09:31	05/06/16 00:42	1
Indeno[1,2,3-cd]pyrene	<0.16		0.16	0.061	ug/L		05/03/16 09:31	05/06/16 00:42	1
Isophorone	<1.6		1.6	0.31	ug/L		05/03/16 09:31	05/06/16 00:42	1
2-Methylnaphthalene	**5.1**		0.41	0.053	ug/L		05/03/16 09:31	05/06/16 00:42	1

Client Sample ID: MW-1-GW-04282016

Date Collected: 04/28/16 08:22
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-1

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	**1.4**	**J**	1.6	0.25	ug/L		05/03/16 09:31	05/06/16 00:42	1
3 & 4 Methylphenol	**16**		1.6	0.37	ug/L		05/03/16 09:31	05/06/16 00:42	1
Naphthalene	**150**	**E J**	0.82	0.25	ug/L		05/03/16 09:31	05/06/16 00:42	1
2-Nitroaniline	<4.1		4.1	1.1	ug/L		05/03/16 09:31	05/06/16 00:42	1
3-Nitroaniline	<8.2	UJ	8.2	1.5	ug/L		05/03/16 09:31	05/06/16 00:42	1
4-Nitroaniline	<8.2		8.2	1.4	ug/L		05/03/16 09:31	05/06/16 00:42	1
Nitrobenzene	<0.82		0.82	0.37	ug/L		05/03/16 09:31	05/06/16 00:42	1
2-Nitrophenol	<8.2		8.2	2.1	ug/L		05/03/16 09:31	05/06/16 00:42	1
4-Nitrophenol	<16		16	6.1	ug/L		05/03/16 09:31	05/06/16 00:42	1
N-Nitrosodi-n-propylamine	<0.41		0.41	0.13	ug/L		05/03/16 09:31	05/06/16 00:42	1
N-Nitrosodiphenylamine	<0.82		0.82	0.30	ug/L		05/03/16 09:31	05/06/16 00:42	1
2,2'-oxybis[1-chloropropane]	<1.6		1.6	0.31	ug/L		05/03/16 09:31	05/06/16 00:42	1
Pentachlorophenol	<16		16	3.2	ug/L		05/03/16 09:31	05/06/16 00:42	1
Phenanthrene	**1.1**		0.82	0.25	ug/L		05/03/16 09:31	05/06/16 00:42	1
Phenol	**30**		4.1	0.55	ug/L		05/03/16 09:31	05/06/16 00:42	1
Pyrene	<0.82		0.82	0.35	ug/L		05/03/16 09:31	05/06/16 00:42	1
2,4,5-Trichlorophenol	<8.2		8.2	2.1	ug/L		05/03/16 09:31	05/06/16 00:42	1
2,4,6-Trichlorophenol	<4.1		4.1	0.59	ug/L		05/03/16 09:31	05/06/16 00:42	1
Benzaldehyde	<16	UJ	16	12	ug/L		05/03/16 09:31	05/06/16 00:42	1
Caprolactam	<8.2		8.2	1.2	ug/L		05/03/16 09:31	05/06/16 00:42	1
Atrazine	<4.1		4.1	0.51	ug/L		05/03/16 09:31	05/06/16 00:42	1
1,1'-Biphenyl	<4.1		4.1	0.30	ug/L		05/03/16 09:31	05/06/16 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*60*		*30 - 123*	*05/03/16 09:31*	*05/06/16 00:42*	*1*
2-Fluorophenol (Surr)	*47*		*30 - 110*	*05/03/16 09:31*	*05/06/16 00:42*	*1*
Nitrobenzene-d5 (Surr)	*59*		*33 - 139*	*05/03/16 09:31*	*05/06/16 00:42*	*1*
Phenol-d5 (Surr)	*42*		*20 - 100*	*05/03/16 09:31*	*05/06/16 00:42*	*1*
Terphenyl-d14 (Surr)	*96*		*42 - 150*	*05/03/16 09:31*	*05/06/16 00:42*	*1*
2,4,6-Tribromophenol (Surr)	*114*		*30 - 150*	*05/03/16 09:31*	*05/06/16 00:42*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.041		0.041	0.0054	ug/L		04/29/16 10:36	05/03/16 12:42	1
alpha-BHC	<0.041		0.041	0.0027	ug/L		04/29/16 10:36	05/03/16 12:42	1
alpha-Chlordane	<0.041		0.041	0.0045	ug/L		04/29/16 10:36	05/03/16 12:42	1
beta-BHC	<0.041		0.041	0.010	ug/L		04/29/16 10:36	05/03/16 12:42	1
4,4'-DDD	<0.041		0.041	0.014	ug/L		04/29/16 10:36	05/03/16 12:42	1
4,4'-DDE	<0.041		0.041	0.0039	ug/L		04/29/16 10:36	05/03/16 12:42	1
4,4'-DDT	<0.041		0.041	0.0033	ug/L		04/29/16 10:36	05/03/16 12:42	1
delta-BHC	<0.041		0.041	0.011	ug/L		04/29/16 10:36	05/03/16 12:42	1
Dieldrin	<0.041		0.041	0.013	ug/L		04/29/16 10:36	05/03/16 12:42	1
Endosulfan I	<0.041		0.041	0.0042	ug/L		04/29/16 10:36	05/03/16 12:42	1
Endosulfan II	<0.041		0.041	0.0029	ug/L		04/29/16 10:36	05/03/16 12:42	1
Endosulfan sulfate	<0.041		0.041	0.012	ug/L		04/29/16 10:36	05/03/16 12:42	1
Endrin	<0.041		0.041	0.015	ug/L		04/29/16 10:36	05/03/16 12:42	1
Endrin aldehyde	<0.041		0.041	0.0084	ug/L		04/29/16 10:36	05/03/16 12:42	1
Endrin ketone	<0.041		0.041	0.017	ug/L		04/29/16 10:36	05/03/16 12:42	1
gamma-BHC (Lindane)	<0.041		0.041	0.0057	ug/L		04/29/16 10:36	05/03/16 12:42	1
gamma-Chlordane	<0.041		0.041	0.0074	ug/L		04/29/16 10:36	05/03/16 12:42	1

Client Sample ID: MW-1-GW-04282016

Date Collected: 04/28/16 08:22
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-1

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	<0.041		0.041	0.014	ug/L		04/29/16 10:36	05/03/16 12:42	1
Heptachlor epoxide	<0.041		0.041	0.014	ug/L		04/29/16 10:36	05/03/16 12:42	1
Methoxychlor	<0.082		0.082	0.023	ug/L		04/29/16 10:36	05/03/16 12:42	1
Toxaphene	<0.41		0.41	0.20	ug/L		04/29/16 10:36	05/03/16 12:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*63*		*30 - 143*	*04/29/16 10:36*	*05/03/16 12:42*	*1*
Tetrachloro-m-xylene	*96*		*30 - 120*	*04/29/16 10:36*	*05/03/16 12:42*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.41		0.41	0.068	ug/L		04/29/16 10:36	05/03/16 19:10	1
PCB-1221	<0.41		0.41	0.20	ug/L		04/29/16 10:36	05/03/16 19:10	1
PCB-1232	<0.41		0.41	0.20	ug/L		04/29/16 10:36	05/03/16 19:10	1
PCB-1242	<0.41		0.41	0.20	ug/L		04/29/16 10:36	05/03/16 19:10	1
PCB-1248	<0.41		0.41	0.20	ug/L		04/29/16 10:36	05/03/16 19:10	1
PCB-1254	<0.41		0.41	0.20	ug/L		04/29/16 10:36	05/03/16 19:10	1
PCB-1260	<0.41		0.41	0.071	ug/L		04/29/16 10:36	05/03/16 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*58*		*30 - 127*	*04/29/16 10:36*	*05/03/16 19:10*	*1*
DCB Decachlorobiphenyl	*57*		*30 - 150*	*04/29/16 10:36*	*05/03/16 19:10*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.20**	~~J~~ J	0.20	0.062	mg/L		04/29/16 08:31	04/29/16 19:01	1
Antimony	<0.020		0.020	0.0064	mg/L		04/29/16 08:31	04/29/16 19:01	1
Arsenic	<0.010		0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:01	1
Barium	**0.88**		0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:01	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		04/29/16 08:31	04/29/16 19:01	1
Cadmium	<0.0020		0.0020	0.00094	mg/L		04/29/16 08:31	04/29/16 19:01	1
Calcium	**930**		1.0	0.30	mg/L		04/29/16 08:31	05/03/16 02:41	5
Chromium	<0.010		0.010	0.0024	mg/L		04/29/16 08:31	04/29/16 19:01	1
Cobalt	<0.0050		0.0050	0.00096	mg/L		04/29/16 08:31	04/29/16 19:01	1
Copper	**0.0070**	J	0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:01	1
Iron	<0.20		0.20	0.10	mg/L		04/29/16 08:31	04/29/16 19:01	1
Lead	**0.0041**	J	0.0050	0.0024	mg/L		04/29/16 08:31	05/03/16 17:24	1
Magnesium	**0.059**	J	0.10	0.034	mg/L		04/29/16 08:31	04/29/16 19:01	1
Manganese	**0.0052**	J	0.010	0.0034	mg/L		04/29/16 08:31	04/29/16 19:01	1
Nickel	**0.017**		0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:01	1
Potassium	**52**		0.50	0.16	mg/L		04/29/16 08:31	04/29/16 19:01	1
Selenium	<0.010	~~J~~	0.010	0.0046	mg/L		04/29/16 08:31	04/29/16 19:01	1
Silver	<0.0050		0.0050	0.0013	mg/L		04/29/16 08:31	04/29/16 19:01	1
Sodium	**250**		1.0	0.43	mg/L		04/29/16 08:31	04/29/16 19:01	1
Thallium	<0.010		0.010	0.0028	mg/L		04/29/16 08:31	04/29/16 19:01	1
Vanadium	<0.0050		0.0050	0.0019	mg/L		04/29/16 08:31	04/29/16 19:01	1
Zinc	**0.032**		0.020	0.0090	mg/L		04/29/16 08:31	04/29/16 19:01	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.077**	J ~~J~~	0.20	0.062	mg/L		04/29/16 08:31	04/29/16 19:06	1

Client Sample ID: MW-1-GW-04282016

Date Collected: 04/28/16 08:22
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-1

Matrix: Water

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.020		0.020	0.0064	mg/L		04/29/16 08:31	04/29/16 19:06	1
Arsenic	**0.0055**	**J**	0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:06	1
Barium	**0.78**		0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:06	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		04/29/16 08:31	04/29/16 19:06	1
Cadmium	<0.0020		0.0020	0.00094	mg/L		04/29/16 08:31	04/29/16 19:06	1
Calcium	**790**		1.0	0.30	mg/L		04/29/16 08:31	05/03/16 02:51	5
Chromium	<0.010		0.010	0.0024	mg/L		04/29/16 08:31	04/29/16 19:06	1
Cobalt	<0.0050		0.0050	0.00096	mg/L		04/29/16 08:31	04/29/16 19:06	1
Copper	**0.0047**	**J**	0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:06	1
Iron	**0.21**		0.20	0.10	mg/L		04/29/16 08:31	04/29/16 19:06	1
Lead	**0.0028**	**J**	0.0050	0.0024	mg/L		04/29/16 08:31	05/03/16 17:30	1
Magnesium	<0.10		0.10	0.034	mg/L		04/29/16 08:31	04/29/16 19:06	1
Manganese	<0.010		0.010	0.0034	mg/L		04/29/16 08:31	04/29/16 19:06	1
Nickel	**0.016**		0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:06	1
Potassium	**48**		0.50	0.16	mg/L		04/29/16 08:31	04/29/16 19:06	1
Selenium	**0.0051**	**J**	0.010	0.0046	mg/L		04/29/16 08:31	04/29/16 19:06	1
Silver	<0.0050		0.0050	0.0013	mg/L		04/29/16 08:31	04/29/16 19:06	1
Sodium	**230**		1.0	0.43	mg/L		04/29/16 08:31	04/29/16 19:06	1
Thallium	<0.010		0.010	0.0028	mg/L		04/29/16 08:31	04/29/16 19:06	1
Vanadium	<0.0050		0.0050	0.0019	mg/L		04/29/16 08:31	04/29/16 19:06	1
Zinc	**0.013**	**J**	0.020	0.0090	mg/L		04/29/16 08:31	04/29/16 19:06	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/02/16 13:45	05/04/16 14:10	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00013**	**J**	0.00020	0.00011	mg/L		05/02/16 13:45	05/04/16 14:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**2.5**		1.0	0.22	mg/L			05/03/16 05:24	1
Sulfate	**18**		5.0	2.0	mg/L			05/06/16 09:10	1
Total Organic Carbon - Duplicates	**26**		1.0	0.23	mg/L			05/08/16 17:44	1
Nitrogen, Nitrate	**0.050**	**J**	0.10	0.045	mg/L			05/03/16 14:20	1
Total Suspended Solids	**8.5**		5.0	1.6	mg/L			05/03/16 11:28	1
Ammonia	**53**	**B**	5.0	1.1	mg/L		05/09/16 19:05	05/09/16 22:00	25
Nitrogen, Nitrite < 0.020	~~0.0066~~	~~J B~~ UB	0.020	0.0032	mg/L			04/29/16 14:51	1
Nitrogen, Nitrate Nitrite	**0.057**	**J**	0.10	0.045	mg/L			05/02/16 19:19	1

Client Sample ID: MW-13-GW-04282016

Date Collected: 04/28/16 10:22
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**85**	D	50	17	ug/L			05/11/16 11:26	10
Benzene	**630**	D	5.0	1.5	ug/L			05/11/16 11:26	10
Bromodichloromethane	<10		10	3.7	ug/L			05/11/16 11:26	10
Bromoform	<10		10	4.8	ug/L			05/11/16 11:26	10
Bromomethane	<20	UJ	20	8.0	ug/L			05/11/16 11:26	10
Carbon disulfide	<20		20	4.5	ug/L			05/11/16 11:26	10
Carbon tetrachloride	<10		10	3.8	ug/L			05/11/16 11:26	10
Chlorobenzene	<10		10	3.9	ug/L			05/11/16 11:26	10
Chloroethane	<10		10	5.1	ug/L			05/11/16 11:26	10
Chloroform	<10		10	3.7	ug/L			05/11/16 11:26	10
Chloromethane	<10		10	3.2	ug/L			05/11/16 11:26	10
cis-1,2-Dichloroethene	**54**	JD	10	4.1	ug/L			05/11/16 11:26	10
cis-1,3-Dichloropropene	<10		10	4.2	ug/L			05/11/16 11:26	10
Cyclohexane	<10		10	4.9	ug/L			05/11/16 11:26	10
Dibromochloromethane	<10		10	4.9	ug/L			05/11/16 11:26	10
1,2-Dibromo-3-Chloropropane	<50		50	20	ug/L			05/11/16 11:26	10
1,2-Dibromoethane	<10		10	3.9	ug/L			05/11/16 11:26	10
1,2-Dichlorobenzene	**17**		10	3.3	ug/L			05/11/16 11:26	10
1,3-Dichlorobenzene	<10		10	4.0	ug/L			05/11/16 11:26	10
1,4-Dichlorobenzene	<10		10	3.6	ug/L			05/11/16 11:26	10
Dichlorodifluoromethane	<20		20	6.7	ug/L			05/11/16 11:26	10
1,1-Dichloroethane	**52**	JD	10	4.1	ug/L			05/11/16 11:26	10
1,2-Dichloroethane	<10		10	3.9	ug/L			05/11/16 11:26	10
1,1-Dichloroethene	<10		10	3.9	ug/L			05/11/16 11:26	10
1,2-Dichloropropane	<10		10	4.3	ug/L			05/11/16 11:26	10
2-Hexanone	<50		50	16	ug/L			05/11/16 11:26	10
Isopropylbenzene	**97**	D	10	3.9	ug/L			05/11/16 11:26	10
Methyl acetate	<50		50	20	ug/L			05/11/16 11:26	10
Methylcyclohexane	<10		10	3.2	ug/L			05/11/16 11:26	10
Methylene Chloride	<50		50	16	ug/L			05/11/16 11:26	10
Methyl Ethyl Ketone	**60**	D	50	21	ug/L			05/11/16 11:26	10
methyl isobutyl ketone	<50		50	22	ug/L			05/11/16 11:26	10
Methyl tert-butyl ether	<10		10	3.9	ug/L			05/11/16 11:26	10
Styrene	<10	UJ	10	3.9	ug/L			05/11/16 11:26	10
1,1,2,2-Tetrachloroethane	<10		10	4.0	ug/L			05/11/16 11:26	10
Tetrachloroethene	<10		10	3.7	ug/L			05/11/16 11:26	10
trans-1,2-Dichloroethene	<10		10	3.5	ug/L			05/11/16 11:26	10
trans-1,3-Dichloropropene	<10		10	3.6	ug/L			05/11/16 11:26	10
1,2,4-Trichlorobenzene	<10		10	3.4	ug/L			05/11/16 11:26	10
1,1,1-Trichloroethane	<10		10	3.8	ug/L			05/11/16 11:26	10
1,1,2-Trichloroethane	<10		10	3.5	ug/L			05/11/16 11:26	10
Trichloroethene	<5.0		5.0	1.6	ug/L			05/11/16 11:26	10
Trichlorofluoromethane	<10		10	4.3	ug/L			05/11/16 11:26	10
1,1,2-Trichloro-1,2,2-trifluoroethane	<10		10	4.6	ug/L			05/11/16 11:26	10
Vinyl chloride	**15**	D	5.0	2.0	ug/L			05/11/16 11:26	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*71 - 120*		*05/11/16 11:26*	*10*
Dibromofluoromethane	*86*		*70 - 120*		*05/11/16 11:26*	*10*

Client Sample ID: MW-13-GW-04282016

Date Collected: 04/28/16 10:22
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 127*		*05/11/16 11:26*	*10*
Toluene-d8 (Surr)	*89*		*75 - 120*		*05/11/16 11:26*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**2500**	D	50	18	ug/L			05/11/16 11:54	100
Toluene	**8100**	JD	50	15	ug/L			05/11/16 11:54	100
Xylenes, Total	**17000**	D	100	22	ug/L			05/11/16 11:54	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*71 - 120*		*05/11/16 11:54*	*100*
Dibromofluoromethane	*91*		*70 - 120*		*05/11/16 11:54*	*100*
1,2-Dichloroethane-d4 (Surr)	*103*		*71 - 127*		*05/11/16 11:54*	*100*
Toluene-d8 (Surr)	*93*		*75 - 120*		*05/11/16 11:54*	*100*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**1.4**	J D	4.1	1.3	ug/L		05/03/16 09:31	05/06/16 01:08	5
Acenaphthylene	**4.5**	D	4.1	1.1	ug/L		05/03/16 09:31	05/06/16 01:08	5
Acetophenone	<20		20	2.7	ug/L		05/03/16 09:31	05/06/16 01:08	5
Anthracene	<4.1		4.1	1.4	ug/L		05/03/16 09:31	05/06/16 01:08	5
Benzo[a]anthracene	<0.81		0.81	0.23	ug/L		05/03/16 09:31	05/06/16 01:08	5
Benzo[a]pyrene	<0.81		0.81	0.40	ug/L		05/03/16 09:31	05/06/16 01:08	5
Benzo[b]fluoranthene	<0.81		0.81	0.33	ug/L		05/03/16 09:31	05/06/16 01:08	5
Benzo[g,h,i]perylene	<4.1		4.1	1.5	ug/L		05/03/16 09:31	05/06/16 01:08	5
Benzo[k]fluoranthene	<0.81		0.81	0.26	ug/L		05/03/16 09:31	05/06/16 01:08	5
Bis(2-chloroethoxy)methane	<8.1		8.1	1.2	ug/L		05/03/16 09:31	05/06/16 01:08	5
Bis(2-chloroethyl)ether	<8.1		8.1	1.2	ug/L		05/03/16 09:31	05/06/16 01:08	5
Bis(2-ethylhexyl) phthalate	<41		41	7.0	ug/L		05/03/16 09:31	05/06/16 01:08	5
4-Bromophenyl phenyl ether	<20		20	2.2	ug/L		05/03/16 09:31	05/06/16 01:08	5
Butyl benzyl phthalate	<8.1		8.1	2.0	ug/L		05/03/16 09:31	05/06/16 01:08	5
Carbazole	<20		20	1.4	ug/L		05/03/16 09:31	05/06/16 01:08	5
4-Chloroaniline	<41	UJ	41	8.2	ug/L		05/03/16 09:31	05/06/16 01:08	5
4-Chloro-3-methylphenol	<41		41	9.4	ug/L		05/03/16 09:31	05/06/16 01:08	5
2-Chloronaphthalene	<8.1		8.1	0.96	ug/L		05/03/16 09:31	05/06/16 01:08	5
2-Chlorophenol	<20		20	2.3	ug/L		05/03/16 09:31	05/06/16 01:08	5
4-Chlorophenyl phenyl ether	<20		20	2.6	ug/L		05/03/16 09:31	05/06/16 01:08	5
Chrysene	<2.0		2.0	0.28	ug/L		05/03/16 09:31	05/06/16 01:08	5
Dibenz(a,h)anthracene	<1.2		1.2	0.21	ug/L		05/03/16 09:31	05/06/16 01:08	5
Dibenzofuran	<8.1		8.1	1.1	ug/L		05/03/16 09:31	05/06/16 01:08	5
3,3'-Dichlorobenzidine	<20		20	7.0	ug/L		05/03/16 09:31	05/06/16 01:08	5
2,4-Dichlorophenol	<41		41	11	ug/L		05/03/16 09:31	05/06/16 01:08	5
Diethyl phthalate	**33**	D	8.1	1.5	ug/L		05/03/16 09:31	05/06/16 01:08	5
2,4-Dimethylphenol	**37**	J D	41	7.3	ug/L		05/03/16 09:31	05/06/16 01:08	5
Dimethyl phthalate	<8.1		8.1	1.3	ug/L		05/03/16 09:31	05/06/16 01:08	5
Di-n-butyl phthalate	**5.5**	J D	20	3.0	ug/L		05/03/16 09:31	05/06/16 01:08	5
4,6-Dinitro-2-methylphenol	<81		81	24	ug/L		05/03/16 09:31	05/06/16 01:08	5
2,4-Dinitrophenol	<81		81	35	ug/L		05/03/16 09:31	05/06/16 01:08	5
2,4-Dinitrotoluene	<4.1		4.1	1.0	ug/L		05/03/16 09:31	05/06/16 01:08	5
2,6-Dinitrotoluene	<2.0		2.0	0.30	ug/L		05/03/16 09:31	05/06/16 01:08	5

Client Sample ID: MW-13-GW-04282016

Date Collected: 04/28/16 10:22
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-2

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	<41		41	4.3	ug/L		05/03/16 09:31	05/06/16 01:08	5
Fluoranthene	<4.1		4.1	1.8	ug/L		05/03/16 09:31	05/06/16 01:08	5
Fluorene	**1.8**	J D	4.1	0.99	ug/L		05/03/16 09:31	05/06/16 01:08	5
Hexachlorobenzene	<2.0		2.0	0.32	ug/L		05/03/16 09:31	05/06/16 01:08	5
Hexachlorobutadiene	<20		20	2.1	ug/L		05/03/16 09:31	05/06/16 01:08	5
Hexachlorocyclopentadiene	<81	UJ	81	26	ug/L		05/03/16 09:31	05/06/16 01:08	5
Hexachloroethane	<20		20	2.4	ug/L		05/03/16 09:31	05/06/16 01:08	5
Indeno[1,2,3-cd]pyrene	<0.81		0.81	0.30	ug/L		05/03/16 09:31	05/06/16 01:08	5
Isophorone	**5.4**	J D	8.1	1.5	ug/L		05/03/16 09:31	05/06/16 01:08	5
2-Methylnaphthalene	**22**	D	2.0	0.27	ug/L		05/03/16 09:31	05/06/16 01:08	5
2-Methylphenol	<8.1		8.1	1.2	ug/L		05/03/16 09:31	05/06/16 01:08	5
3 & 4 Methylphenol	**210**	D	8.1	1.8	ug/L		05/03/16 09:31	05/06/16 01:08	5
Naphthalene	**250**	D	4.1	1.3	ug/L		05/03/16 09:31	05/06/16 01:08	5
2-Nitroaniline	<20		20	5.2	ug/L		05/03/16 09:31	05/06/16 01:08	5
3-Nitroaniline	<41	UJ	41	7.3	ug/L		05/03/16 09:31	05/06/16 01:08	5
4-Nitroaniline	<41		41	6.8	ug/L		05/03/16 09:31	05/06/16 01:08	5
Nitrobenzene	<4.1		4.1	1.8	ug/L		05/03/16 09:31	05/06/16 01:08	5
2-Nitrophenol	<41		41	10	ug/L		05/03/16 09:31	05/06/16 01:08	5
4-Nitrophenol	<81		81	30	ug/L		05/03/16 09:31	05/06/16 01:08	5
N-Nitrosodi-n-propylamine	<2.0		2.0	0.63	ug/L		05/03/16 09:31	05/06/16 01:08	5
N-Nitrosodiphenylamine	**14**	D	4.1	1.5	ug/L		05/03/16 09:31	05/06/16 01:08	5
2,2'-oxybis[1-chloropropane]	<8.1		8.1	1.5	ug/L		05/03/16 09:31	05/06/16 01:08	5
Pentachlorophenol	**65**	J D	81	16	ug/L		05/03/16 09:31	05/06/16 01:08	5
Phenanthrene	<4.1		4.1	1.2	ug/L		05/03/16 09:31	05/06/16 01:08	5
Phenol	**56**	JD	20	2.7	ug/L		05/03/16 09:31	05/06/16 01:08	5
Pyrene	<4.1		4.1	1.7	ug/L		05/03/16 09:31	05/06/16 01:08	5
2,4,5-Trichlorophenol	<41		41	10	ug/L		05/03/16 09:31	05/06/16 01:08	5
2,4,6-Trichlorophenol	<20		20	2.9	ug/L		05/03/16 09:31	05/06/16 01:08	5
Benzaldehyde	<81	UJ	81	62	ug/L		05/03/16 09:31	05/06/16 01:08	5
Caprolactam	<41		41	6.1	ug/L		05/03/16 09:31	05/06/16 01:08	5
Atrazine	<20		20	2.5	ug/L		05/03/16 09:31	05/06/16 01:08	5
1,1'-Biphenyl	**3.1**	J D	20	1.5	ug/L		05/03/16 09:31	05/06/16 01:08	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*30 - 123*	*05/03/16 09:31*	*05/06/16 01:08*	*5*
2-Fluorophenol (Surr)	*55*		*30 - 110*	*05/03/16 09:31*	*05/06/16 01:08*	*5*
Nitrobenzene-d5 (Surr)	*84*		*33 - 139*	*05/03/16 09:31*	*05/06/16 01:08*	*5*
Phenol-d5 (Surr)	*50*		*20 - 100*	*05/03/16 09:31*	*05/06/16 01:08*	*5*
Terphenyl-d14 (Surr)	*109*		*42 - 150*	*05/03/16 09:31*	*05/06/16 01:08*	*5*
2,4,6-Tribromophenol (Surr)	*128*		*30 - 150*	*05/03/16 09:31*	*05/06/16 01:08*	*5*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.041		0.041	0.0054	ug/L		04/29/16 10:36	05/03/16 13:02	1
alpha-BHC	<0.041		0.041	0.0027	ug/L		04/29/16 10:36	05/03/16 13:02	1
alpha-Chlordane	<0.041		0.041	0.0045	ug/L		04/29/16 10:36	05/03/16 13:02	1
beta-BHC	<0.041		0.041	0.010	ug/L		04/29/16 10:36	05/03/16 13:02	1
4,4'-DDD	<0.041		0.041	0.014	ug/L		04/29/16 10:36	05/03/16 13:02	1
4,4'-DDE	<0.041		0.041	0.0039	ug/L		04/29/16 10:36	05/03/16 13:02	1
4,4'-DDT	<0.041		0.041	0.0033	ug/L		04/29/16 10:36	05/03/16 13:02	1

Client Sample ID: MW-13-GW-04282016

Date Collected: 04/28/16 10:22
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-2

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	<0.041		0.041	0.011	ug/L		04/29/16 10:36	05/03/16 13:02	1
Dieldrin	<0.041		0.041	0.013	ug/L		04/29/16 10:36	05/03/16 13:02	1
Endosulfan I	<0.041		0.041	0.0042	ug/L		04/29/16 10:36	05/03/16 13:02	1
Endosulfan II	<0.041		0.041	0.0029	ug/L		04/29/16 10:36	05/03/16 13:02	1
Endosulfan sulfate	<0.041		0.041	0.012	ug/L		04/29/16 10:36	05/03/16 13:02	1
Endrin	<0.041		0.041	0.015	ug/L		04/29/16 10:36	05/03/16 13:02	1
Endrin aldehyde	<0.041		0.041	0.0084	ug/L		04/29/16 10:36	05/03/16 13:02	1
Endrin ketone	<0.041		0.041	0.017	ug/L		04/29/16 10:36	05/03/16 13:02	1
gamma-BHC (Lindane)	<0.041		0.041	0.0057	ug/L		04/29/16 10:36	05/03/16 13:02	1
gamma-Chlordane	<0.041		0.041	0.0074	ug/L		04/29/16 10:36	05/03/16 13:02	1
Heptachlor	<0.041		0.041	0.014	ug/L		04/29/16 10:36	05/03/16 13:02	1
Heptachlor epoxide	<0.041		0.041	0.014	ug/L		04/29/16 10:36	05/03/16 13:02	1
Methoxychlor	<0.082		0.082	0.024	ug/L		04/29/16 10:36	05/03/16 13:02	1
Toxaphene	<0.41		0.41	0.20	ug/L		04/29/16 10:36	05/03/16 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*34*		*30 - 143*	*04/29/16 10:36*	*05/03/16 13:02*	*1*
Tetrachloro-m-xylene	*622*	*X*	*30 - 120*	*04/29/16 10:36*	*05/03/16 13:02*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<2.0		2.0	0.34	ug/L		04/29/16 10:36	05/04/16 10:28	5
PCB-1221	<2.0		2.0	1.0	ug/L		04/29/16 10:36	05/04/16 10:28	5
PCB-1232	<2.0		2.0	1.0	ug/L		04/29/16 10:36	05/04/16 10:28	5
PCB-1242	<2.0		2.0	1.0	ug/L		04/29/16 10:36	05/04/16 10:28	5
PCB-1248	<2.0		2.0	1.0	ug/L		04/29/16 10:36	05/04/16 10:28	5
PCB-1254	<2.0		2.0	1.0	ug/L		04/29/16 10:36	05/04/16 10:28	5
PCB-1260	<2.0		2.0	0.36	ug/L		04/29/16 10:36	05/04/16 10:28	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*30 - 127*	*04/29/16 10:36*	*05/04/16 10:28*	*5*
DCB Decachlorobiphenyl	*39*		*30 - 150*	*04/29/16 10:36*	*05/04/16 10:28*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20	~~J~~	0.20	0.062	mg/L		04/29/16 08:31	04/29/16 19:11	1
Antimony	<0.020		0.020	0.0064	mg/L		04/29/16 08:31	04/29/16 19:11	1
Arsenic	**0.0087**	**J**	0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:11	1
Barium	**0.24**		0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:11	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		04/29/16 08:31	04/29/16 19:11	1
Cadmium	<0.0020		0.0020	0.00094	mg/L		04/29/16 08:31	04/29/16 19:11	1
Calcium	**110**		0.20	0.059	mg/L		04/29/16 08:31	04/29/16 19:11	1
Chromium	**0.0044**	**J**	0.010	0.0024	mg/L		04/29/16 08:31	04/29/16 19:11	1
Cobalt	**0.0027**	**J**	0.0050	0.00096	mg/L		04/29/16 08:31	04/29/16 19:11	1
Copper	**0.0022**	**J**	0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:11	1
Iron	**7.4**		0.20	0.10	mg/L		04/29/16 08:31	04/29/16 19:11	1
Lead	<0.0050		0.0050	0.0024	mg/L		04/29/16 08:31	05/03/16 17:35	1
Magnesium	**42**		0.10	0.034	mg/L		04/29/16 08:31	04/29/16 19:11	1
Manganese	**0.42**		0.010	0.0034	mg/L		04/29/16 08:31	04/29/16 19:11	1
Nickel	**0.011**		0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:11	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Lake Calumet Cluster Site

TestAmerica Job ID: 500-110872-1

Client Sample ID: MW-13-GW-04282016

Date Collected: 04/28/16 10:22
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-2

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**64**		0.50	0.16	mg/L		04/29/16 08:31	04/29/16 19:11	1
Selenium	<0.010		0.010	0.0046	mg/L		04/29/16 08:31	04/29/16 19:11	1
Silver	<0.0050		0.0050	0.0013	mg/L		04/29/16 08:31	04/29/16 19:11	1
Sodium	**230**		1.0	0.43	mg/L		04/29/16 08:31	04/29/16 19:11	1
Thallium	<0.010		0.010	0.0028	mg/L		04/29/16 08:31	04/29/16 19:11	1
Vanadium	**0.0035**	**J**	0.0050	0.0019	mg/L		04/29/16 08:31	04/29/16 19:11	1
Zinc	<0.020		0.020	0.0090	mg/L		04/29/16 08:31	04/29/16 19:11	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		04/29/16 08:31	04/29/16 19:25	1
Antimony	<0.020		0.020	0.0064	mg/L		04/29/16 08:31	04/29/16 19:25	1
Arsenic	**0.0049**	**J**	0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:25	1
Barium	**0.24**		0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:25	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		04/29/16 08:31	04/29/16 19:25	1
Cadmium	<0.0020		0.0020	0.00094	mg/L		04/29/16 08:31	04/29/16 19:25	1
Calcium	**110**		0.20	0.059	mg/L		04/29/16 08:31	04/29/16 19:25	1
Chromium	**0.0035**	**J**	0.010	0.0024	mg/L		04/29/16 08:31	04/29/16 19:25	1
Cobalt	**0.0017**	**J**	0.0050	0.00096	mg/L		04/29/16 08:31	04/29/16 19:25	1
Copper	<0.010		0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:25	1
Iron	**6.7**		0.20	0.10	mg/L		04/29/16 08:31	04/29/16 19:25	1
Lead	<0.0050		0.0050	0.0024	mg/L		04/29/16 08:31	05/03/16 17:48	1
Magnesium	**43**		0.10	0.034	mg/L		04/29/16 08:31	04/29/16 19:25	1
Manganese	**0.35**		0.010	0.0034	mg/L		04/29/16 08:31	04/29/16 19:25	1
Nickel	**0.011**		0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:25	1
Potassium	**66**		0.50	0.16	mg/L		04/29/16 08:31	04/29/16 19:25	1
Selenium	<0.010		0.010	0.0046	mg/L		04/29/16 08:31	04/29/16 19:25	1
Silver	<0.0050		0.0050	0.0013	mg/L		04/29/16 08:31	04/29/16 19:25	1
Sodium	**230**		1.0	0.43	mg/L		04/29/16 08:31	04/29/16 19:25	1
Thallium	<0.010		0.010	0.0028	mg/L		04/29/16 08:31	04/29/16 19:25	1
Vanadium	**0.0033**	**J**	0.0050	0.0019	mg/L		04/29/16 08:31	04/29/16 19:25	1
Zinc	<0.020		0.020	0.0090	mg/L		04/29/16 08:31	04/29/16 19:25	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/02/16 13:45	05/04/16 14:27	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/02/16 13:45	05/04/16 14:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**1.7**		1.0	0.22	mg/L			05/03/16 05:27	1
Sulfate	**390**		100	40	mg/L			05/06/16 09:11	20
Total Organic Carbon - Duplicates	**67**		4.0	0.92	mg/L			05/08/16 18:24	4
Nitrogen, Nitrate	<0.10		0.10	0.045	mg/L			05/03/16 14:20	1
Total Suspended Solids	**14**	**J**	5.0	1.6	mg/L			05/03/16 11:31	1
Ammonia	**61**	**B**	4.0	0.86	mg/L		05/09/16 19:05	05/09/16 22:09	20
Nitrogen, Nitrite	< 0.020 **0.010 J B** UB		0.020	0.0032	mg/L			04/29/16 14:52	1

Client: ARCADIS U.S., Inc.
Project/Site: Lake Calumet Cluster Site

TestAmerica Job ID: 500-110872-1

Client Sample ID: MW-13-GW-04282016
Date Collected: 04/28/16 10:22
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	<0.10		0.10	0.045	mg/L			05/02/16 19:25	1

Client Sample ID: MW-12-GW-04282016

Date Collected: 04/28/16 12:40
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**160**	D	5.0	1.5	ug/L			05/11/16 12:21	10
Bromodichloromethane	<10		10	3.7	ug/L			05/11/16 12:21	10
Bromoform	<10		10	4.8	ug/L			05/11/16 12:21	10
Bromomethane	<20	UJ	20	8.0	ug/L			05/11/16 12:21	10
Carbon disulfide	<20		20	4.5	ug/L			05/11/16 12:21	10
Carbon tetrachloride	<10		10	3.8	ug/L			05/11/16 12:21	10
Chlorobenzene	<10		10	3.9	ug/L			05/11/16 12:21	10
Chloroethane	**26**	D	10	5.1	ug/L			05/11/16 12:21	10
Chloroform	<10		10	3.7	ug/L			05/11/16 12:21	10
Chloromethane	<10		10	3.2	ug/L			05/11/16 12:21	10
cis-1,2-Dichloroethene	**1100**	D	10	4.1	ug/L			05/11/16 12:21	10
cis-1,3-Dichloropropene	<10		10	4.2	ug/L			05/11/16 12:21	10
Cyclohexane	<10		10	4.9	ug/L			05/11/16 12:21	10
Dibromochloromethane	<10		10	4.9	ug/L			05/11/16 12:21	10
1,2-Dibromo-3-Chloropropane	<50		50	20	ug/L			05/11/16 12:21	10
1,2-Dibromoethane	<10		10	3.9	ug/L			05/11/16 12:21	10
1,2-Dichlorobenzene	<10		10	3.3	ug/L			05/11/16 12:21	10
1,3-Dichlorobenzene	<10		10	4.0	ug/L			05/11/16 12:21	10
1,4-Dichlorobenzene	<10		10	3.6	ug/L			05/11/16 12:21	10
Dichlorodifluoromethane	<20		20	6.7	ug/L			05/11/16 12:21	10
1,2-Dichloroethane	<10		10	3.9	ug/L			05/11/16 12:21	10
1,1-Dichloroethene	**10**	D	10	3.9	ug/L			05/11/16 12:21	10
1,2-Dichloropropane	<10		10	4.3	ug/L			05/11/16 12:21	10
2-Hexanone	<50		50	16	ug/L			05/11/16 12:21	10
Isopropylbenzene	**43**	D	10	3.9	ug/L			05/11/16 12:21	10
Methyl acetate	<50		50	20	ug/L			05/11/16 12:21	10
Methylcyclohexane	<10		10	3.2	ug/L			05/11/16 12:21	10
Methyl tert-butyl ether	<10		10	3.9	ug/L			05/11/16 12:21	10
Styrene	<10		10	3.9	ug/L			05/11/16 12:21	10
1,1,2,2-Tetrachloroethane	<10		10	4.0	ug/L			05/11/16 12:21	10
Tetrachloroethene	**680**	D	10	3.7	ug/L			05/11/16 12:21	10
trans-1,2-Dichloroethene	**23**	D	10	3.5	ug/L			05/11/16 12:21	10
trans-1,3-Dichloropropene	<10		10	3.6	ug/L			05/11/16 12:21	10
1,2,4-Trichlorobenzene	<10		10	3.4	ug/L			05/11/16 12:21	10
1,1,1-Trichloroethane	<10		10	3.8	ug/L			05/11/16 12:21	10
1,1,2-Trichloroethane	<10		10	3.5	ug/L			05/11/16 12:21	10
Trichloroethene	**720**	D	5.0	1.6	ug/L			05/11/16 12:21	10
Trichlorofluoromethane	<10		10	4.3	ug/L			05/11/16 12:21	10
1,1,2-Trichloro-1,2,2-trifluoroethane	<10		10	4.6	ug/L			05/11/16 12:21	10
Vinyl chloride	**420**	D	5.0	2.0	ug/L			05/11/16 12:21	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*71 - 120*		*05/11/16 12:21*	*10*
Dibromofluoromethane	*86*		*70 - 120*		*05/11/16 12:21*	*10*
1,2-Dichloroethane-d4 (Surr)	*97*		*71 - 127*		*05/11/16 12:21*	*10*
Toluene-d8 (Surr)	*92*		*75 - 120*		*05/11/16 12:21*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**4800**	D	500	170	ug/L			05/11/16 12:49	100

Client Sample ID: MW-12-GW-04282016

Date Collected: 04/28/16 12:40
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	3300	D	100	41	ug/L			05/11/16 12:49	100
Ethylbenzene	3400	D	50	18	ug/L			05/11/16 12:49	100
Methylene Chloride	6300	D	500	160	ug/L			05/11/16 12:49	100
Methyl Ethyl Ketone	2700	D	500	210	ug/L			05/11/16 12:49	100
methyl isobutyl ketone	24000	D	5000	2200	ug/L			05/12/16 15:19	1000
Toluene	11000	D	50	15	ug/L			05/11/16 12:49	100
Xylenes, Total	19000	D	100	22	ug/L			05/11/16 12:49	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*71 - 120*		*05/11/16 12:49*	*100*
4-Bromofluorobenzene (Surr)	*90*		*71 - 120*		*05/12/16 15:19*	*1000*
Dibromofluoromethane	*89*		*70 - 120*		*05/11/16 12:49*	*100*
Dibromofluoromethane	*90*		*70 - 120*		*05/12/16 15:19*	*1000*
1,2-Dichloroethane-d4 (Surr)	*103*		*71 - 127*		*05/11/16 12:49*	*100*
1,2-Dichloroethane-d4 (Surr)	*105*		*71 - 127*		*05/12/16 15:19*	*1000*
Toluene-d8 (Surr)	*100*		*75 - 120*		*05/11/16 12:49*	*100*
Toluene-d8 (Surr)	*94*		*75 - 120*		*05/12/16 15:19*	*1000*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<81	UJ	81	25	ug/L		05/03/16 09:31	05/06/16 01:35	100
Acenaphthylene	<81		81	22	ug/L		05/03/16 09:31	05/06/16 01:35	100
Acetophenone	<410		410	54	ug/L		05/03/16 09:31	05/06/16 01:35	100
Anthracene	<81		81	27	ug/L		05/03/16 09:31	05/06/16 01:35	100
Benzo[a]anthracene	<16		16	4.6	ug/L		05/03/16 09:31	05/06/16 01:35	100
Benzo[a]pyrene	<16		16	8.0	ug/L		05/03/16 09:31	05/06/16 01:35	100
Benzo[b]fluoranthene	<16		16	6.6	ug/L		05/03/16 09:31	05/06/16 01:35	100
Benzo[g,h,i]perylene	<81		81	31	ug/L		05/03/16 09:31	05/06/16 01:35	100
Benzo[k]fluoranthene	<16		16	5.2	ug/L		05/03/16 09:31	05/06/16 01:35	100
Bis(2-chloroethoxy)methane	<160		160	23	ug/L		05/03/16 09:31	05/06/16 01:35	100
Bis(2-chloroethyl)ether	<160		160	24	ug/L		05/03/16 09:31	05/06/16 01:35	100
Bis(2-ethylhexyl) phthalate	<810		810	140	ug/L		05/03/16 09:31	05/06/16 01:35	100
4-Bromophenyl phenyl ether	<410		410	44	ug/L		05/03/16 09:31	05/06/16 01:35	100
Butyl benzyl phthalate	<160		160	39	ug/L		05/03/16 09:31	05/06/16 01:35	100
Carbazole	<410		410	29	ug/L		05/03/16 09:31	05/06/16 01:35	100
4-Chloroaniline	<810		810	160	ug/L		05/03/16 09:31	05/06/16 01:35	100
4-Chloro-3-methylphenol	<810		810	190	ug/L		05/03/16 09:31	05/06/16 01:35	100
2-Chloronaphthalene	<160		160	19	ug/L		05/03/16 09:31	05/06/16 01:35	100
2-Chlorophenol	<410		410	45	ug/L		05/03/16 09:31	05/06/16 01:35	100
4-Chlorophenyl phenyl ether	<410		410	52	ug/L		05/03/16 09:31	05/06/16 01:35	100
Chrysene	<41		41	5.5	ug/L		05/03/16 09:31	05/06/16 01:35	100
Dibenz(a,h)anthracene	<24		24	4.1	ug/L		05/03/16 09:31	05/06/16 01:35	100
Dibenzofuran	<160		160	21	ug/L		05/03/16 09:31	05/06/16 01:35	100
3,3'-Dichlorobenzidine	<410		410	140	ug/L		05/03/16 09:31	05/06/16 01:35	100
2,4-Dichlorophenol	<810		810	210	ug/L		05/03/16 09:31	05/06/16 01:35	100
Diethyl phthalate	<160		160	29	ug/L		05/03/16 09:31	05/06/16 01:35	100
2,4-Dimethylphenol	<810		810	150	ug/L		05/03/16 09:31	05/06/16 01:35	100
Dimethyl phthalate	<160		160	26	ug/L		05/03/16 09:31	05/06/16 01:35	100
Di-n-butyl phthalate	<410		410	59	ug/L		05/03/16 09:31	05/06/16 01:35	100
4,6-Dinitro-2-methylphenol	<1600		1600	480	ug/L		05/03/16 09:31	05/06/16 01:35	100

Client Sample ID: MW-12-GW-04282016

Date Collected: 04/28/16 12:40
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-3

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	<1600	UJ	1600	700	ug/L		05/03/16 09:31	05/06/16 01:35	100
2,4-Dinitrotoluene	<81		81	20	ug/L		05/03/16 09:31	05/06/16 01:35	100
2,6-Dinitrotoluene	<41		41	6.0	ug/L		05/03/16 09:31	05/06/16 01:35	100
Di-n-octyl phthalate	<810		810	85	ug/L		05/03/16 09:31	05/06/16 01:35	100
Fluoranthene	<81		81	37	ug/L		05/03/16 09:31	05/06/16 01:35	100
Fluorene	<81		81	20	ug/L		05/03/16 09:31	05/06/16 01:35	100
Hexachlorobenzene	<41		41	6.5	ug/L		05/03/16 09:31	05/06/16 01:35	100
Hexachlorobutadiene	<410		410	42	ug/L		05/03/16 09:31	05/06/16 01:35	100
Hexachlorocyclopentadiene	<1600		1600	520	ug/L		05/03/16 09:31	05/06/16 01:35	100
Hexachloroethane	<410		410	49	ug/L		05/03/16 09:31	05/06/16 01:35	100
Indeno[1,2,3-cd]pyrene	<16		16	6.1	ug/L		05/03/16 09:31	05/06/16 01:35	100
2-Methylnaphthalene	**46**	JD	41	5.3	ug/L		05/03/16 09:31	05/06/16 01:35	100
Naphthalene	**160**	JD	81	25	ug/L		05/03/16 09:31	05/06/16 01:35	100
2-Nitroaniline	<410	UJ	410	100	ug/L		05/03/16 09:31	05/06/16 01:35	100
3-Nitroaniline	<810		810	150	ug/L		05/03/16 09:31	05/06/16 01:35	100
4-Nitroaniline	<810		810	140	ug/L		05/03/16 09:31	05/06/16 01:35	100
Nitrobenzene	<81		81	37	ug/L		05/03/16 09:31	05/06/16 01:35	100
2-Nitrophenol	<810		810	200	ug/L		05/03/16 09:31	05/06/16 01:35	100
4-Nitrophenol	<1600		1600	600	ug/L		05/03/16 09:31	05/06/16 01:35	100
N-Nitrosodi-n-propylamine	<41		41	13	ug/L		05/03/16 09:31	05/06/16 01:35	100
N-Nitrosodiphenylamine	<81		81	30	ug/L		05/03/16 09:31	05/06/16 01:35	100
2,2'-oxybis[1-chloropropane]	<160		160	31	ug/L		05/03/16 09:31	05/06/16 01:35	100
Pentachlorophenol	**1200**	J D	1600	320	ug/L		05/03/16 09:31	05/06/16 01:35	100
Phenanthrene	<81	UJ	81	25	ug/L		05/03/16 09:31	05/06/16 01:35	100
Phenol	**4000**	JD	410	55	ug/L		05/03/16 09:31	05/06/16 01:35	100
Pyrene	<81	UJ	81	35	ug/L		05/03/16 09:31	05/06/16 01:35	100
2,4,5-Trichlorophenol	<810		810	210	ug/L		05/03/16 09:31	05/06/16 01:35	100
2,4,6-Trichlorophenol	<410		410	58	ug/L		05/03/16 09:31	05/06/16 01:35	100
Benzaldehyde	<1600		1600	1200	ug/L		05/03/16 09:31	05/06/16 01:35	100
Caprolactam	<810		810	120	ug/L		05/03/16 09:31	05/06/16 01:35	100
Atrazine	<410		410	51	ug/L		05/03/16 09:31	05/06/16 01:35	100
1,1'-Biphenyl	<410		410	29	ug/L		05/03/16 09:31	05/06/16 01:35	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*D*	*30 - 123*	*05/03/16 09:31*	*05/06/16 01:35*	*100*
2-Fluorophenol (Surr)	*0*	*D*	*30 - 110*	*05/03/16 09:31*	*05/06/16 01:35*	*100*
Nitrobenzene-d5 (Surr)	*0*	*D*	*33 - 139*	*05/03/16 09:31*	*05/06/16 01:35*	*100*
Phenol-d5 (Surr)	*0*	*D*	*20 - 100*	*05/03/16 09:31*	*05/06/16 01:35*	*100*
Terphenyl-d14 (Surr)	*0*	*D*	*42 - 150*	*05/03/16 09:31*	*05/06/16 01:35*	*100*
2,4,6-Tribromophenol (Surr)	*0*	*D*	*30 - 150*	*05/03/16 09:31*	*05/06/16 01:35*	*100*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	**19000**	JD	810	150	ug/L		05/03/16 09:31	05/07/16 08:32	500
2-Methylphenol	**7600**	JD	810	120	ug/L		05/03/16 09:31	05/07/16 08:32	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*D*	*30 - 123*	*05/03/16 09:31*	*05/07/16 08:32*	*500*
2-Fluorophenol (Surr)	*0*	*D*	*30 - 110*	*05/03/16 09:31*	*05/07/16 08:32*	*500*
Nitrobenzene-d5 (Surr)	*0*	*D*	*33 - 139*	*05/03/16 09:31*	*05/07/16 08:32*	*500*

Client Sample ID: MW-12-GW-04282016

Date Collected: 04/28/16 12:40
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-3

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenol-d5 (Surr)	*0*	*D*	*20 - 100*	*05/03/16 09:31*	*05/07/16 08:32*	*500*
Terphenyl-d14 (Surr)	*0*	*D*	*42 - 150*	*05/03/16 09:31*	*05/07/16 08:32*	*500*
2,4,6-Tribromophenol (Surr)	*0*	*D*	*30 - 150*	*05/03/16 09:31*	*05/07/16 08:32*	*500*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3 & 4 Methylphenol	**510000**	JD	16000	3700	ug/L		05/03/16 09:31	05/07/16 08:58	10000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	*0*	*D*	*30 - 123*	*05/03/16 09:31*	*05/07/16 08:58*	*10000*
2-Fluorophenol (Surr)	*0*	*D*	*30 - 110*	*05/03/16 09:31*	*05/07/16 08:58*	*10000*
Nitrobenzene-d5 (Surr)	*0*	*D*	*33 - 139*	*05/03/16 09:31*	*05/07/16 08:58*	*10000*
Phenol-d5 (Surr)	*0*	*D*	*20 - 100*	*05/03/16 09:31*	*05/07/16 08:58*	*10000*
Terphenyl-d14 (Surr)	*0*	*D*	*42 - 150*	*05/03/16 09:31*	*05/07/16 08:58*	*10000*
2,4,6-Tribromophenol (Surr)	*0*	*D*	*30 - 150*	*05/03/16 09:31*	*05/07/16 08:58*	*10000*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.20		0.20	0.026	ug/L		04/29/16 10:36	05/03/16 13:21	5
alpha-BHC	<0.20		0.20	0.013	ug/L		04/29/16 10:36	05/03/16 13:21	5
alpha-Chlordane	<0.20		0.20	0.022	ug/L		04/29/16 10:36	05/03/16 13:21	5
beta-BHC	<0.20		0.20	0.050	ug/L		04/29/16 10:36	05/03/16 13:21	5
4,4'-DDD	<0.20		0.20	0.066	ug/L		04/29/16 10:36	05/03/16 13:21	5
4,4'-DDE	<0.20		0.20	0.019	ug/L		04/29/16 10:36	05/03/16 13:21	5
4,4'-DDT	<0.20		0.20	0.016	ug/L		04/29/16 10:36	05/03/16 13:21	5
delta-BHC	<0.20		0.20	0.051	ug/L		04/29/16 10:36	05/03/16 13:21	5
Dieldrin	<0.20		0.20	0.064	ug/L		04/29/16 10:36	05/03/16 13:21	5
Endosulfan I	<0.20		0.20	0.020	ug/L		04/29/16 10:36	05/03/16 13:21	5
Endosulfan II	<0.20		0.20	0.014	ug/L		04/29/16 10:36	05/03/16 13:21	5
Endosulfan sulfate	<0.20		0.20	0.058	ug/L		04/29/16 10:36	05/03/16 13:21	5
Endrin	<0.20		0.20	0.070	ug/L		04/29/16 10:36	05/03/16 13:21	5
Endrin aldehyde	<0.20		0.20	0.041	ug/L		04/29/16 10:36	05/03/16 13:21	5
Endrin ketone	<0.20		0.20	0.084	ug/L		04/29/16 10:36	05/03/16 13:21	5
gamma-BHC (Lindane)	<0.20		0.20	0.028	ug/L		04/29/16 10:36	05/03/16 13:21	5
gamma-Chlordane	<0.20		0.20	0.036	ug/L		04/29/16 10:36	05/03/16 13:21	5
Heptachlor	<0.20		0.20	0.067	ug/L		04/29/16 10:36	05/03/16 13:21	5
Heptachlor epoxide	<0.20		0.20	0.068	ug/L		04/29/16 10:36	05/03/16 13:21	5
Methoxychlor	<0.40		0.40	0.11	ug/L		04/29/16 10:36	05/03/16 13:21	5
Toxaphene	<2.0		2.0	0.99	ug/L		04/29/16 10:36	05/03/16 13:21	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*27*	*X*	*30 - 143*	*04/29/16 10:36*	*05/03/16 13:21*	*5*
Tetrachloro-m-xylene	*79*		*30 - 120*	*04/29/16 10:36*	*05/03/16 13:21*	*5*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<2.0		2.0	0.33	ug/L		04/29/16 10:36	05/04/16 10:44	5
PCB-1221	<2.0		2.0	0.99	ug/L		04/29/16 10:36	05/04/16 10:44	5
PCB-1232	<2.0		2.0	0.99	ug/L		04/29/16 10:36	05/04/16 10:44	5
PCB-1242	<2.0		2.0	0.99	ug/L		04/29/16 10:36	05/04/16 10:44	5

Client Sample ID: MW-12-GW-04282016

Date Collected: 04/28/16 12:40
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-3

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	<2.0		2.0	0.99	ug/L		04/29/16 10:36	05/04/16 10:44	5
PCB-1254	<2.0		2.0	0.99	ug/L		04/29/16 10:36	05/04/16 10:44	5
PCB-1260	<2.0		2.0	0.35	ug/L		04/29/16 10:36	05/04/16 10:44	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*53*		*30 - 127*	*04/29/16 10:36*	*05/04/16 10:44*	*5*
DCB Decachlorobiphenyl	*29*	*X*	*30 - 150*	*04/29/16 10:36*	*05/04/16 10:44*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.15**	**J**	0.20	0.062	mg/L		04/29/16 08:31	04/29/16 19:30	1
Antimony	**0.019**	**J**	0.020	0.0064	mg/L		04/29/16 08:31	04/29/16 19:30	1
Arsenic	**0.030**		0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:30	1
Barium	**0.091**		0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:30	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		04/29/16 08:31	04/29/16 19:30	1
Cadmium	<0.0020		0.0020	0.00094	mg/L		04/29/16 08:31	04/29/16 19:30	1
Calcium	**350**		0.20	0.059	mg/L		04/29/16 08:31	04/29/16 19:30	1
Chromium	**0.067**		0.010	0.0024	mg/L		04/29/16 08:31	04/29/16 19:30	1
Cobalt	**0.12**		0.0050	0.00096	mg/L		04/29/16 08:31	04/29/16 19:30	1
Copper	**0.0049**	**J**	0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:30	1
Iron	**42**		0.20	0.10	mg/L		04/29/16 08:31	04/29/16 19:30	1
Lead	**0.011**		0.0050	0.0024	mg/L		04/29/16 08:31	05/03/16 17:53	1
Magnesium	**300**		0.10	0.034	mg/L		04/29/16 08:31	04/29/16 19:30	1
Manganese	**2.6**		0.010	0.0034	mg/L		04/29/16 08:31	04/29/16 19:30	1
Nickel	**0.27**		0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:30	1
Potassium	**150**		0.50	0.16	mg/L		04/29/16 08:31	04/29/16 19:30	1
Selenium	**0.023**		0.010	0.0046	mg/L		04/29/16 08:31	05/03/16 17:53	1
Silver	<0.0050		0.0050	0.0013	mg/L		04/29/16 08:31	04/29/16 19:30	1
Sodium	**1600**		5.0	2.2	mg/L		04/29/16 08:31	05/03/16 03:11	5
Thallium	<0.010		0.010	0.0028	mg/L		04/29/16 08:31	04/29/16 19:30	1
Vanadium	**0.017**		0.0050	0.0019	mg/L		04/29/16 08:31	04/29/16 19:30	1
Zinc	**0.23**		0.020	0.0090	mg/L		04/29/16 08:31	04/29/16 19:30	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.062**	**J**	0.20	0.062	mg/L		04/29/16 08:31	04/29/16 19:36	1
Antimony	**0.012**	**J**	0.020	0.0064	mg/L		04/29/16 08:31	04/29/16 19:36	1
Arsenic	**0.026**		0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:36	1
Barium	**0.088**		0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:36	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		04/29/16 08:31	04/29/16 19:36	1
Cadmium	<0.0020		0.0020	0.00094	mg/L		04/29/16 08:31	04/29/16 19:36	1
Calcium	**330**		0.20	0.059	mg/L		04/29/16 08:31	04/29/16 19:36	1
Chromium	**0.063**		0.010	0.0024	mg/L		04/29/16 08:31	04/29/16 19:36	1
Cobalt	**0.12**		0.0050	0.00096	mg/L		04/29/16 08:31	04/29/16 19:36	1
Copper	**0.0035**	**J**	0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:36	1
Iron	**41**		0.20	0.10	mg/L		04/29/16 08:31	04/29/16 19:36	1
Lead	**0.0040**	**J**	0.0050	0.0024	mg/L		04/29/16 08:31	05/03/16 17:59	1
Magnesium	**290**		0.10	0.034	mg/L		04/29/16 08:31	04/29/16 19:36	1
Manganese	**2.4**		0.010	0.0034	mg/L		04/29/16 08:31	04/29/16 19:36	1
Nickel	**0.25**		0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:36	1

Client Sample ID: MW-12-GW-04282016

Date Collected: 04/28/16 12:40
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-3

Matrix: Water

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**150**		0.50	0.16	mg/L		04/29/16 08:31	04/29/16 19:36	1
Selenium	**0.019**		0.010	0.0046	mg/L		04/29/16 08:31	05/03/16 17:59	1
Silver	<0.0050		0.0050	0.0013	mg/L		04/29/16 08:31	04/29/16 19:36	1
Sodium	**1700**		5.0	2.2	mg/L		04/29/16 08:31	05/03/16 03:31	5
Thallium	<0.010		0.010	0.0028	mg/L		04/29/16 08:31	04/29/16 19:36	1
Vanadium	**0.017**		0.0050	0.0019	mg/L		04/29/16 08:31	04/29/16 19:36	1
Zinc	**0.12**		0.020	0.0090	mg/L		04/29/16 08:31	04/29/16 19:36	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/02/16 13:45	05/04/16 14:33	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/02/16 13:45	05/04/16 14:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**7.6**		1.0	0.22	mg/L			05/03/16 05:30	1
Sulfate	**1600**		500	200	mg/L			05/06/16 09:12	100
Total Organic Carbon - Duplicates	**2200**		80	18	mg/L			05/08/16 18:45	80
Nitrogen, Nitrate	<0.10		0.10	0.045	mg/L			05/03/16 14:20	1
Total Suspended Solids	**140**		9.1	2.9	mg/L			05/03/16 11:34	1
Ammonia	**440**	~~B~~	20	4.3	mg/L		05/09/16 19:05	05/09/16 22:12	100
Nitrogen, Nitrite	< 0.020 ~~0.030~~	~~B~~ UB	0.020	0.0032	mg/L			04/29/16 14:52	1
Nitrogen, Nitrate Nitrite	<0.10		0.10	0.045	mg/L			05/02/16 19:26	1

Client Sample ID: MW-11-GW-04282016

Date Collected: 04/28/16 14:22
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**15**		5.0	1.7	ug/L			05/11/16 13:17	1
Benzene	**88**		0.50	0.15	ug/L			05/11/16 13:17	1
Bromodichloromethane	<1.0		1.0	0.37	ug/L			05/11/16 13:17	1
Bromoform	<1.0		1.0	0.48	ug/L			05/11/16 13:17	1
Bromomethane	<2.0	UJ	2.0	0.80	ug/L			05/11/16 13:17	1
Carbon disulfide	<2.0		2.0	0.45	ug/L			05/11/16 13:17	1
Carbon tetrachloride	<1.0		1.0	0.38	ug/L			05/11/16 13:17	1
Chlorobenzene	**6.9**		1.0	0.39	ug/L			05/11/16 13:17	1
Chloroethane	**5.3**		1.0	0.51	ug/L			05/11/16 13:17	1
Chloroform	<1.0		1.0	0.37	ug/L			05/11/16 13:17	1
Chloromethane	<1.0		1.0	0.32	ug/L			05/11/16 13:17	1
cis-1,2-Dichloroethene	<1.0		1.0	0.41	ug/L			05/11/16 13:17	1
cis-1,3-Dichloropropene	<1.0		1.0	0.42	ug/L			05/11/16 13:17	1
Cyclohexane	**75**		1.0	0.49	ug/L			05/11/16 13:17	1
Dibromochloromethane	<1.0		1.0	0.49	ug/L			05/11/16 13:17	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0	2.0	ug/L			05/11/16 13:17	1
1,2-Dibromoethane	<1.0		1.0	0.39	ug/L			05/11/16 13:17	1
1,2-Dichlorobenzene	<1.0		1.0	0.33	ug/L			05/11/16 13:17	1
1,3-Dichlorobenzene	<1.0		1.0	0.40	ug/L			05/11/16 13:17	1
1,4-Dichlorobenzene	**2.0**		1.0	0.36	ug/L			05/11/16 13:17	1
Dichlorodifluoromethane	<2.0		2.0	0.67	ug/L			05/11/16 13:17	1
1,1-Dichloroethane	<1.0		1.0	0.41	ug/L			05/11/16 13:17	1
1,2-Dichloroethane	<1.0		1.0	0.39	ug/L			05/11/16 13:17	1
1,1-Dichloroethene	<1.0		1.0	0.39	ug/L			05/11/16 13:17	1
1,2-Dichloropropane	<1.0		1.0	0.43	ug/L			05/11/16 13:17	1
Ethylbenzene	**100**		0.50	0.18	ug/L			05/11/16 13:17	1
2-Hexanone	<5.0		5.0	1.6	ug/L			05/11/16 13:17	1
Isopropylbenzene	**36**		1.0	0.39	ug/L			05/11/16 13:17	1
Methyl acetate	<5.0		5.0	2.0	ug/L			05/11/16 13:17	1
Methylcyclohexane	**72**		1.0	0.32	ug/L			05/11/16 13:17	1
Methylene Chloride	<5.0		5.0	1.6	ug/L			05/11/16 13:17	1
Methyl Ethyl Ketone	**5.1**		5.0	2.1	ug/L			05/11/16 13:17	1
methyl isobutyl ketone	**5.0**		5.0	2.2	ug/L			05/11/16 13:17	1
Methyl tert-butyl ether	<1.0		1.0	0.39	ug/L			05/11/16 13:17	1
Styrene	**4.3**		1.0	0.39	ug/L			05/11/16 13:17	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.40	ug/L			05/11/16 13:17	1
Tetrachloroethene	<1.0		1.0	0.37	ug/L			05/11/16 13:17	1
Toluene	**150**		0.50	0.15	ug/L			05/11/16 13:17	1
trans-1,2-Dichloroethene	<1.0		1.0	0.35	ug/L			05/11/16 13:17	1
trans-1,3-Dichloropropene	<1.0		1.0	0.36	ug/L			05/11/16 13:17	1
1,2,4-Trichlorobenzene	<1.0		1.0	0.34	ug/L			05/11/16 13:17	1
1,1,1-Trichloroethane	<1.0		1.0	0.38	ug/L			05/11/16 13:17	1
1,1,2-Trichloroethane	<1.0		1.0	0.35	ug/L			05/11/16 13:17	1
Trichloroethene	<0.50		0.50	0.16	ug/L			05/11/16 13:17	1
Trichlorofluoromethane	<1.0		1.0	0.43	ug/L			05/11/16 13:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0	0.46	ug/L			05/11/16 13:17	1
Vinyl chloride	**0.70**		0.50	0.20	ug/L			05/11/16 13:17	1

Client Sample ID: MW-11-GW-04282016

Date Collected: 04/28/16 14:22
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-4

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*71 - 120*		*05/11/16 13:17*	*1*
Dibromofluoromethane	*85*		*70 - 120*		*05/11/16 13:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 127*		*05/11/16 13:17*	*1*
Toluene-d8 (Surr)	*89*		*75 - 120*		*05/11/16 13:17*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	**620**	D	5.0	1.1	ug/L			05/11/16 13:45	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*71 - 120*		*05/11/16 13:45*	*5*
Dibromofluoromethane	*88*		*70 - 120*		*05/11/16 13:45*	*5*
1,2-Dichloroethane-d4 (Surr)	*103*		*71 - 127*		*05/11/16 13:45*	*5*
Toluene-d8 (Surr)	*91*		*75 - 120*		*05/11/16 13:45*	*5*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<8.0		8.0	2.5	ug/L		05/03/16 09:31	05/05/16 03:15	10
Acenaphthylene	<8.0		8.0	2.2	ug/L		05/03/16 09:31	05/05/16 03:15	10
Acetophenone	<40		40	5.3	ug/L		05/03/16 09:31	05/05/16 03:15	10
Anthracene	<8.0		8.0	2.7	ug/L		05/03/16 09:31	05/05/16 03:15	10
Benzo[a]anthracene	<1.6		1.6	0.46	ug/L		05/03/16 09:31	05/05/16 03:15	10
Benzo[a]pyrene	<1.6		1.6	0.80	ug/L		05/03/16 09:31	05/05/16 03:15	10
Benzo[b]fluoranthene	<1.6		1.6	0.65	ug/L		05/03/16 09:31	05/05/16 03:15	10
Benzo[g,h,i]perylene	<8.0		8.0	3.0	ug/L		05/03/16 09:31	05/05/16 03:15	10
Benzo[k]fluoranthene	<1.6		1.6	0.51	ug/L		05/03/16 09:31	05/05/16 03:15	10
Bis(2-chloroethoxy)methane	**3.8**	J D	16	2.3	ug/L		05/03/16 09:31	05/05/16 03:15	10
Bis(2-chloroethyl)ether	<16		16	2.4	ug/L		05/03/16 09:31	05/05/16 03:15	10
Bis(2-ethylhexyl) phthalate	<80		80	14	ug/L		05/03/16 09:31	05/05/16 03:15	10
4-Bromophenyl phenyl ether	<40		40	4.3	ug/L		05/03/16 09:31	05/05/16 03:15	10
Butyl benzyl phthalate	<16		16	3.9	ug/L		05/03/16 09:31	05/05/16 03:15	10
Carbazole	<40		40	2.8	ug/L		05/03/16 09:31	05/05/16 03:15	10
4-Chloroaniline	<80	UJ	80	16	ug/L		05/03/16 09:31	05/05/16 03:15	10
4-Chloro-3-methylphenol	<80		80	19	ug/L		05/03/16 09:31	05/05/16 03:15	10
2-Chloronaphthalene	<16		16	1.9	ug/L		05/03/16 09:31	05/05/16 03:15	10
2-Chlorophenol	<40		40	4.5	ug/L		05/03/16 09:31	05/05/16 03:15	10
4-Chlorophenyl phenyl ether	<40		40	5.1	ug/L		05/03/16 09:31	05/05/16 03:15	10
Chrysene	<4.0		4.0	0.55	ug/L		05/03/16 09:31	05/05/16 03:15	10
Dibenz(a,h)anthracene	<2.4		2.4	0.41	ug/L		05/03/16 09:31	05/05/16 03:15	10
Dibenzofuran	<16		16	2.1	ug/L		05/03/16 09:31	05/05/16 03:15	10
3,3'-Dichlorobenzidine	<40		40	14	ug/L		05/03/16 09:31	05/05/16 03:15	10
2,4-Dichlorophenol	<80		80	21	ug/L		05/03/16 09:31	05/05/16 03:15	10
Diethyl phthalate	<16		16	2.9	ug/L		05/03/16 09:31	05/05/16 03:15	10
2,4-Dimethylphenol	**16**	J D	80	14	ug/L		05/03/16 09:31	05/05/16 03:15	10
Dimethyl phthalate	<16		16	2.5	ug/L		05/03/16 09:31	05/05/16 03:15	10
Di-n-butyl phthalate	<40		40	5.9	ug/L		05/03/16 09:31	05/05/16 03:15	10
4,6-Dinitro-2-methylphenol	<160		160	47	ug/L		05/03/16 09:31	05/05/16 03:15	10
2,4-Dinitrophenol	<160		160	69	ug/L		05/03/16 09:31	05/05/16 03:15	10
2,4-Dinitrotoluene	<8.0		8.0	2.0	ug/L		05/03/16 09:31	05/05/16 03:15	10
2,6-Dinitrotoluene	<4.0		4.0	0.59	ug/L		05/03/16 09:31	05/05/16 03:15	10
Di-n-octyl phthalate	<80		80	8.4	ug/L		05/03/16 09:31	05/05/16 03:15	10

Client Sample ID: MW-11-GW-04282016

Date Collected: 04/28/16 14:22
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-4

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<8.0		8.0	3.7	ug/L		05/03/16 09:31	05/05/16 03:15	10
Fluorene	<8.0		8.0	2.0	ug/L		05/03/16 09:31	05/05/16 03:15	10
Hexachlorobenzene	<4.0		4.0	0.64	ug/L		05/03/16 09:31	05/05/16 03:15	10
Hexachlorobutadiene	<40		40	4.1	ug/L		05/03/16 09:31	05/05/16 03:15	10
Hexachlorocyclopentadiene	<160	UJ	160	51	ug/L		05/03/16 09:31	05/05/16 03:15	10
Hexachloroethane	<40		40	4.8	ug/L		05/03/16 09:31	05/05/16 03:15	10
Indeno[1,2,3-cd]pyrene	<1.6		1.6	0.60	ug/L		05/03/16 09:31	05/05/16 03:15	10
Isophorone	<16		16	3.0	ug/L		05/03/16 09:31	05/05/16 03:15	10
2-Methylnaphthalene	**2.9**	J D	4.0	0.52	ug/L		05/03/16 09:31	05/05/16 03:15	10
2-Methylphenol	<16		16	2.5	ug/L		05/03/16 09:31	05/05/16 03:15	10
3 & 4 Methylphenol	**180**	D	16	3.6	ug/L		05/03/16 09:31	05/05/16 03:15	10
Naphthalene	**8.0**	D	8.0	2.5	ug/L		05/03/16 09:31	05/05/16 03:15	10
2-Nitroaniline	<40		40	10	ug/L		05/03/16 09:31	05/05/16 03:15	10
3-Nitroaniline	<80		80	14	ug/L		05/03/16 09:31	05/05/16 03:15	10
4-Nitroaniline	<80		80	13	ug/L		05/03/16 09:31	05/05/16 03:15	10
Nitrobenzene	<8.0		8.0	3.6	ug/L		05/03/16 09:31	05/05/16 03:15	10
2-Nitrophenol	<80		80	20	ug/L		05/03/16 09:31	05/05/16 03:15	10
4-Nitrophenol	<160		160	60	ug/L		05/03/16 09:31	05/05/16 03:15	10
N-Nitrosodi-n-propylamine	<4.0		4.0	1.2	ug/L		05/03/16 09:31	05/05/16 03:15	10
N-Nitrosodiphenylamine	<8.0		8.0	3.0	ug/L		05/03/16 09:31	05/05/16 03:15	10
2,2'-oxybis[1-chloropropane]	<16	UJ	16	3.1	ug/L		05/03/16 09:31	05/05/16 03:15	10
Pentachlorophenol	<160		160	32	ug/L		05/03/16 09:31	05/05/16 03:15	10
Phenanthrene	<8.0		8.0	2.4	ug/L		05/03/16 09:31	05/05/16 03:15	10
Phenol	**31**	J D	40	5.4	ug/L		05/03/16 09:31	05/05/16 03:15	10
Pyrene	<8.0		8.0	3.4	ug/L		05/03/16 09:31	05/05/16 03:15	10
2,4,5-Trichlorophenol	<80		80	21	ug/L		05/03/16 09:31	05/05/16 03:15	10
2,4,6-Trichlorophenol	<40		40	5.8	ug/L		05/03/16 09:31	05/05/16 03:15	10
Benzaldehyde	<160	UJ	160	120	ug/L		05/03/16 09:31	05/05/16 03:15	10
Caprolactam	<80		80	12	ug/L		05/03/16 09:31	05/05/16 03:15	10
Atrazine	<40		40	5.0	ug/L		05/03/16 09:31	05/05/16 03:15	10
1,1'-Biphenyl	**19**	J D	40	2.9	ug/L		05/03/16 09:31	05/05/16 03:15	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*30 - 123*	*05/03/16 09:31*	*05/05/16 03:15*	*10*
2-Fluorophenol (Surr)	*56*		*30 - 110*	*05/03/16 09:31*	*05/05/16 03:15*	*10*
Nitrobenzene-d5 (Surr)	*72*		*33 - 139*	*05/03/16 09:31*	*05/05/16 03:15*	*10*
Phenol-d5 (Surr)	*45*		*20 - 100*	*05/03/16 09:31*	*05/05/16 03:15*	*10*
Terphenyl-d14 (Surr)	*88*		*42 - 150*	*05/03/16 09:31*	*05/05/16 03:15*	*10*
2,4,6-Tribromophenol (Surr)	*127*		*30 - 150*	*05/03/16 09:31*	*05/05/16 03:15*	*10*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.040		0.040	0.0053	ug/L		04/29/16 10:36	05/03/16 13:40	1
alpha-BHC	<0.040		0.040	0.0026	ug/L		04/29/16 10:36	05/03/16 13:40	1
alpha-Chlordane	<0.040		0.040	0.0044	ug/L		04/29/16 10:36	05/03/16 13:40	1
beta-BHC	<0.040		0.040	0.010	ug/L		04/29/16 10:36	05/03/16 13:40	1
4,4'-DDD	<0.040		0.040	0.013	ug/L		04/29/16 10:36	05/03/16 13:40	1
4,4'-DDE	<0.040		0.040	0.0038	ug/L		04/29/16 10:36	05/03/16 13:40	1
4,4'-DDT	<0.040		0.040	0.0032	ug/L		04/29/16 10:36	05/03/16 13:40	1
delta-BHC	<0.040		0.040	0.010	ug/L		04/29/16 10:36	05/03/16 13:40	1

Client Sample ID: MW-11-GW-04282016

Date Collected: 04/28/16 14:22
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-4

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	<0.040		0.040	0.013	ug/L		04/29/16 10:36	05/03/16 13:40	1
Endosulfan I	<0.040		0.040	0.0041	ug/L		04/29/16 10:36	05/03/16 13:40	1
Endosulfan II	<0.040		0.040	0.0028	ug/L		04/29/16 10:36	05/03/16 13:40	1
Endosulfan sulfate	<0.040		0.040	0.012	ug/L		04/29/16 10:36	05/03/16 13:40	1
Endrin	<0.040		0.040	0.014	ug/L		04/29/16 10:36	05/03/16 13:40	1
Endrin aldehyde	<0.040		0.040	0.0082	ug/L		04/29/16 10:36	05/03/16 13:40	1
Endrin ketone	<0.040		0.040	0.017	ug/L		04/29/16 10:36	05/03/16 13:40	1
gamma-BHC (Lindane)	<0.040		0.040	0.0056	ug/L		04/29/16 10:36	05/03/16 13:40	1
gamma-Chlordane	<0.040		0.040	0.0072	ug/L		04/29/16 10:36	05/03/16 13:40	1
Heptachlor	<0.040		0.040	0.013	ug/L		04/29/16 10:36	05/03/16 13:40	1
Heptachlor epoxide	<0.040		0.040	0.014	ug/L		04/29/16 10:36	05/03/16 13:40	1
Methoxychlor	<0.080		0.080	0.023	ug/L		04/29/16 10:36	05/03/16 13:40	1
Toxaphene	<0.40		0.40	0.20	ug/L		04/29/16 10:36	05/03/16 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*28*	*X*	*30 - 143*	*04/29/16 10:36*	*05/03/16 13:40*	*1*
Tetrachloro-m-xylene	*54*		*30 - 120*	*04/29/16 10:36*	*05/03/16 13:40*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.40		0.40	0.067	ug/L		04/29/16 10:36	05/03/16 20:27	1
PCB-1221	<0.40		0.40	0.20	ug/L		04/29/16 10:36	05/03/16 20:27	1
PCB-1232	<0.40		0.40	0.20	ug/L		04/29/16 10:36	05/03/16 20:27	1
PCB-1242	<0.40		0.40	0.20	ug/L		04/29/16 10:36	05/03/16 20:27	1
PCB-1248	<0.40		0.40	0.20	ug/L		04/29/16 10:36	05/03/16 20:27	1
PCB-1254	<0.40		0.40	0.20	ug/L		04/29/16 10:36	05/03/16 20:27	1
PCB-1260	<0.40		0.40	0.070	ug/L		04/29/16 10:36	05/03/16 20:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*110*		*30 - 127*	*04/29/16 10:36*	*05/03/16 20:27*	*1*
DCB Decachlorobiphenyl	*66*		*30 - 150*	*04/29/16 10:36*	*05/03/16 20:27*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.12**	**J**	0.20	0.062	mg/L		04/29/16 08:31	04/29/16 19:43	1
Antimony	<0.020		0.020	0.0064	mg/L		04/29/16 08:31	04/29/16 19:43	1
Arsenic	<0.010		0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:43	1
Barium	**1.1**		0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:43	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		04/29/16 08:31	04/29/16 19:43	1
Cadmium	<0.0020		0.0020	0.00094	mg/L		04/29/16 08:31	04/29/16 19:43	1
Calcium	**130**		0.20	0.059	mg/L		04/29/16 08:31	04/29/16 19:43	1
Chromium	**0.0083**	**J**	0.010	0.0024	mg/L		04/29/16 08:31	04/29/16 19:43	1
Cobalt	**0.0021**	**J**	0.0050	0.00096	mg/L		04/29/16 08:31	04/29/16 19:43	1
Copper	**0.0053**	**J**	0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:43	1
Iron	**35**		0.20	0.10	mg/L		04/29/16 08:31	04/29/16 19:43	1
Lead	**0.0073**		0.0050	0.0024	mg/L		04/29/16 08:31	05/03/16 18:06	1
Magnesium	**120**		0.10	0.034	mg/L		04/29/16 08:31	04/29/16 19:43	1
Manganese	**0.27**		0.010	0.0034	mg/L		04/29/16 08:31	04/29/16 19:43	1
Nickel	**0.017**		0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:43	1
Potassium	**140**		0.50	0.16	mg/L		04/29/16 08:31	04/29/16 19:43	1

Client Sample ID: MW-11-GW-04282016

Date Collected: 04/28/16 14:22
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Lab Sample ID: 500-110872-4

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**0.0054**	**J**	0.010	0.0046	mg/L		04/29/16 08:31	04/29/16 19:43	1
Silver	<0.0050		0.0050	0.0013	mg/L		04/29/16 08:31	04/29/16 19:43	1
Sodium	**360**		1.0	0.43	mg/L		04/29/16 08:31	04/29/16 19:43	1
Thallium	<0.010		0.010	0.0028	mg/L		04/29/16 08:31	04/29/16 19:43	1
Vanadium	**0.0053**		0.0050	0.0019	mg/L		04/29/16 08:31	04/29/16 19:43	1
Zinc	**0.014**	**J**	0.020	0.0090	mg/L		04/29/16 08:31	04/29/16 19:43	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		04/29/16 08:31	04/29/16 19:48	1
Antimony	<0.020		0.020	0.0064	mg/L		04/29/16 08:31	04/29/16 19:48	1
Arsenic	<0.010		0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:48	1
Barium	**1.2**		0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:48	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		04/29/16 08:31	04/29/16 19:48	1
Cadmium	<0.0020		0.0020	0.00094	mg/L		04/29/16 08:31	04/29/16 19:48	1
Calcium	**140**		0.20	0.059	mg/L		04/29/16 08:31	04/29/16 19:48	1
Chromium	**0.0083**	**J**	0.010	0.0024	mg/L		04/29/16 08:31	04/29/16 19:48	1
Cobalt	**0.0021**	**J**	0.0050	0.00096	mg/L		04/29/16 08:31	04/29/16 19:48	1
Copper	**0.0039**	**J**	0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:48	1
Iron	**36**		0.20	0.10	mg/L		04/29/16 08:31	04/29/16 19:48	1
Lead	**0.0044**	**J**	0.0050	0.0024	mg/L		04/29/16 08:31	05/03/16 18:11	1
Magnesium	**120**		0.10	0.034	mg/L		04/29/16 08:31	04/29/16 19:48	1
Manganese	**0.28**		0.010	0.0034	mg/L		04/29/16 08:31	04/29/16 19:48	1
Nickel	**0.019**		0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:48	1
Potassium	**150**		0.50	0.16	mg/L		04/29/16 08:31	04/29/16 19:48	1
Selenium	<0.010		0.010	0.0046	mg/L		04/29/16 08:31	04/29/16 19:48	1
Silver	<0.0050		0.0050	0.0013	mg/L		04/29/16 08:31	04/29/16 19:48	1
Sodium	**380**		1.0	0.43	mg/L		04/29/16 08:31	04/29/16 19:48	1
Thallium	<0.010		0.010	0.0028	mg/L		04/29/16 08:31	04/29/16 19:48	1
Vanadium	**0.0056**		0.0050	0.0019	mg/L		04/29/16 08:31	04/29/16 19:48	1
Zinc	<0.020		0.020	0.0090	mg/L		04/29/16 08:31	04/29/16 19:48	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/02/16 13:45	05/04/16 14:37	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/02/16 13:45	05/04/16 14:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<1.0		1.0	0.22	mg/L			05/03/16 05:33	1
Sulfate	**6.5**		5.0	2.0	mg/L			05/06/16 09:15	1
Total Organic Carbon - Duplicates	**91**		4.0	0.92	mg/L			05/08/16 19:05	4
Nitrogen, Nitrate	<0.10		0.10	0.045	mg/L			05/03/16 14:20	1
Total Suspended Solids	**85**		9.1	2.9	mg/L			05/03/16 11:36	1
Ammonia	**67**	**B**	5.0	1.1	mg/L		05/09/16 19:05	05/09/16 22:20	25
Nitrogen, Nitrite	< 0.020 ~~0.020~~	~~B~~ UB	0.020	0.0032	mg/L			04/29/16 14:53	1
Nitrogen, Nitrate Nitrite	<0.10		0.10	0.045	mg/L			05/02/16 19:27	1

Client Sample ID: DUP-1(04282016)

Date Collected: 04/28/16 00:00
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<50		50	17	ug/L			05/11/16 14:12	10
Benzene	**450**	D	5.0	1.5	ug/L			05/11/16 14:12	10
Bromodichloromethane	<10		10	3.7	ug/L			05/11/16 14:12	10
Bromoform	<10		10	4.8	ug/L			05/11/16 14:12	10
Bromomethane	<20	UJ	20	8.0	ug/L			05/11/16 14:12	10
Carbon disulfide	<20		20	4.5	ug/L			05/11/16 14:12	10
Carbon tetrachloride	<10		10	3.8	ug/L			05/11/16 14:12	10
Chlorobenzene	<10		10	3.9	ug/L			05/11/16 14:12	10
Chloroethane	<10		10	5.1	ug/L			05/11/16 14:12	10
Chloroform	<10		10	3.7	ug/L			05/11/16 14:12	10
Chloromethane	<10		10	3.2	ug/L			05/11/16 14:12	10
cis-1,2-Dichloroethene	**26**	JD	10	4.1	ug/L			05/11/16 14:12	10
cis-1,3-Dichloropropene	<10		10	4.2	ug/L			05/11/16 14:12	10
Cyclohexane	<10		10	4.9	ug/L			05/11/16 14:12	10
Dibromochloromethane	<10		10	4.9	ug/L			05/11/16 14:12	10
1,2-Dibromo-3-Chloropropane	<50		50	20	ug/L			05/11/16 14:12	10
1,2-Dibromoethane	<10		10	3.9	ug/L			05/11/16 14:12	10
1,2-Dichlorobenzene	**14**	D	10	3.3	ug/L			05/11/16 14:12	10
1,3-Dichlorobenzene	<10		10	4.0	ug/L			05/11/16 14:12	10
1,4-Dichlorobenzene	<10		10	3.6	ug/L			05/11/16 14:12	10
Dichlorodifluoromethane	<20		20	6.7	ug/L			05/11/16 14:12	10
1,1-Dichloroethane	**23**	JD	10	4.1	ug/L			05/11/16 14:12	10
1,2-Dichloroethane	<10		10	3.9	ug/L			05/11/16 14:12	10
1,1-Dichloroethene	<10		10	3.9	ug/L			05/11/16 14:12	10
1,2-Dichloropropane	<10		10	4.3	ug/L			05/11/16 14:12	10
Ethylbenzene	**1900**	D	5.0	1.8	ug/L			05/11/16 14:12	10
2-Hexanone	<50		50	16	ug/L			05/11/16 14:12	10
Isopropylbenzene	**110**	D	10	3.9	ug/L			05/11/16 14:12	10
Methyl acetate	<50		50	20	ug/L			05/11/16 14:12	10
Methylcyclohexane	<10		10	3.2	ug/L			05/11/16 14:12	10
Methylene Chloride	<50		50	16	ug/L			05/11/16 14:12	10
Methyl Ethyl Ketone	<50		50	21	ug/L			05/11/16 14:12	10
methyl isobutyl ketone	<50		50	22	ug/L			05/11/16 14:12	10
Methyl tert-butyl ether	<10		10	3.9	ug/L			05/11/16 14:12	10
Styrene	**120**	JD	10	3.9	ug/L			05/11/16 14:12	10
1,1,2,2-Tetrachloroethane	<10		10	4.0	ug/L			05/11/16 14:12	10
Tetrachloroethene	<10		10	3.7	ug/L			05/11/16 14:12	10
trans-1,2-Dichloroethene	<10		10	3.5	ug/L			05/11/16 14:12	10
trans-1,3-Dichloropropene	<10		10	3.6	ug/L			05/11/16 14:12	10
1,2,4-Trichlorobenzene	<10		10	3.4	ug/L			05/11/16 14:12	10
1,1,1-Trichloroethane	<10		10	3.8	ug/L			05/11/16 14:12	10
1,1,2-Trichloroethane	<10		10	3.5	ug/L			05/11/16 14:12	10
Trichloroethene	<5.0		5.0	1.6	ug/L			05/11/16 14:12	10
Trichlorofluoromethane	<10		10	4.3	ug/L			05/11/16 14:12	10
1,1,2-Trichloro-1,2,2-trifluoroethane	<10		10	4.6	ug/L			05/11/16 14:12	10
Vinyl chloride	**7.1**	D	5.0	2.0	ug/L			05/11/16 14:12	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*71 - 120*		*05/11/16 14:12*	*10*

Client Sample ID: DUP-1(04282016)

Date Collected: 04/28/16 00:00
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*86*		*70 - 120*		*05/11/16 14:12*	*10*
1,2-Dichloroethane-d4 (Surr)	*99*		*71 - 127*		*05/11/16 14:12*	*10*
Toluene-d8 (Surr)	*90*		*75 - 120*		*05/11/16 14:12*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**4600**	JD	50	15	ug/L			05/11/16 14:40	100
Xylenes, Total	**14000**	D	100	22	ug/L			05/11/16 14:40	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*71 - 120*		*05/11/16 14:40*	*100*
Dibromofluoromethane	*90*		*70 - 120*		*05/11/16 14:40*	*100*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 127*		*05/11/16 14:40*	*100*
Toluene-d8 (Surr)	*94*		*75 - 120*		*05/11/16 14:40*	*100*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<8.1		8.1	2.5	ug/L		05/03/16 09:31	05/05/16 03:42	10
Acenaphthylene	**5.1**	J D	8.1	2.2	ug/L		05/03/16 09:31	05/05/16 03:42	10
Acetophenone	<40		40	5.4	ug/L		05/03/16 09:31	05/05/16 03:42	10
Anthracene	<8.1		8.1	2.7	ug/L		05/03/16 09:31	05/05/16 03:42	10
Benzo[a]anthracene	<1.6		1.6	0.46	ug/L		05/03/16 09:31	05/05/16 03:42	10
Benzo[a]pyrene	<1.6		1.6	0.80	ug/L		05/03/16 09:31	05/05/16 03:42	10
Benzo[b]fluoranthene	<1.6		1.6	0.65	ug/L		05/03/16 09:31	05/05/16 03:42	10
Benzo[g,h,i]perylene	<8.1		8.1	3.0	ug/L		05/03/16 09:31	05/05/16 03:42	10
Benzo[k]fluoranthene	<1.6		1.6	0.52	ug/L		05/03/16 09:31	05/05/16 03:42	10
Bis(2-chloroethoxy)methane	<16		16	2.3	ug/L		05/03/16 09:31	05/05/16 03:42	10
Bis(2-chloroethyl)ether	<16		16	2.4	ug/L		05/03/16 09:31	05/05/16 03:42	10
Bis(2-ethylhexyl) phthalate	<81		81	14	ug/L		05/03/16 09:31	05/05/16 03:42	10
4-Bromophenyl phenyl ether	<40		40	4.4	ug/L		05/03/16 09:31	05/05/16 03:42	10
Butyl benzyl phthalate	<16		16	3.9	ug/L		05/03/16 09:31	05/05/16 03:42	10
Carbazole	<40		40	2.9	ug/L		05/03/16 09:31	05/05/16 03:42	10
4-Chloroaniline	<81	✗ UJ	81	16	ug/L		05/03/16 09:31	05/05/16 03:42	10
4-Chloro-3-methylphenol	<81		81	19	ug/L		05/03/16 09:31	05/05/16 03:42	10
2-Chloronaphthalene	<16		16	1.9	ug/L		05/03/16 09:31	05/05/16 03:42	10
2-Chlorophenol	<40		40	4.5	ug/L		05/03/16 09:31	05/05/16 03:42	10
4-Chlorophenyl phenyl ether	<40		40	5.1	ug/L		05/03/16 09:31	05/05/16 03:42	10
Chrysene	<4.0		4.0	0.55	ug/L		05/03/16 09:31	05/05/16 03:42	10
Dibenz(a,h)anthracene	<2.4		2.4	0.41	ug/L		05/03/16 09:31	05/05/16 03:42	10
Dibenzofuran	<16		16	2.1	ug/L		05/03/16 09:31	05/05/16 03:42	10
3,3'-Dichlorobenzidine	<40		40	14	ug/L		05/03/16 09:31	05/05/16 03:42	10
2,4-Dichlorophenol	<81		81	21	ug/L		05/03/16 09:31	05/05/16 03:42	10
Diethyl phthalate	**31**	D	16	2.9	ug/L		05/03/16 09:31	05/05/16 03:42	10
2,4-Dimethylphenol	**40**	J D	81	15	ug/L		05/03/16 09:31	05/05/16 03:42	10
Dimethyl phthalate	<16		16	2.5	ug/L		05/03/16 09:31	05/05/16 03:42	10
Di-n-butyl phthalate	<40		40	5.9	ug/L		05/03/16 09:31	05/05/16 03:42	10
4,6-Dinitro-2-methylphenol	<160		160	48	ug/L		05/03/16 09:31	05/05/16 03:42	10
2,4-Dinitrophenol	<160	✗	160	69	ug/L		05/03/16 09:31	05/05/16 03:42	10
2,4-Dinitrotoluene	<8.1		8.1	2.0	ug/L		05/03/16 09:31	05/05/16 03:42	10
2,6-Dinitrotoluene	<4.0		4.0	0.59	ug/L		05/03/16 09:31	05/05/16 03:42	10

Client Sample ID: DUP-1(04282016)

Date Collected: 04/28/16 00:00
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-5

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	<81		81	8.5	ug/L		05/03/16 09:31	05/05/16 03:42	10
Fluoranthene	<8.1		8.1	3.7	ug/L		05/03/16 09:31	05/05/16 03:42	10
Fluorene	<8.1		8.1	2.0	ug/L		05/03/16 09:31	05/05/16 03:42	10
Hexachlorobenzene	<4.0		4.0	0.64	ug/L		05/03/16 09:31	05/05/16 03:42	10
Hexachlorobutadiene	<40		40	4.2	ug/L		05/03/16 09:31	05/05/16 03:42	10
Hexachlorocyclopentadiene	<160	UJ	160	51	ug/L		05/03/16 09:31	05/05/16 03:42	10
Hexachloroethane	<40		40	4.8	ug/L		05/03/16 09:31	05/05/16 03:42	10
Indeno[1,2,3-cd]pyrene	<1.6		1.6	0.60	ug/L		05/03/16 09:31	05/05/16 03:42	10
Isophorone	<16		16	3.0	ug/L		05/03/16 09:31	05/05/16 03:42	10
2-Methylnaphthalene	**20**	D	4.0	0.52	ug/L		05/03/16 09:31	05/05/16 03:42	10
2-Methylphenol	**14**	J D	16	2.5	ug/L		05/03/16 09:31	05/05/16 03:42	10
3 & 4 Methylphenol	**280**	D	16	3.6	ug/L		05/03/16 09:31	05/05/16 03:42	10
Naphthalene	**260**	D	8.1	2.5	ug/L		05/03/16 09:31	05/05/16 03:42	10
2-Nitroaniline	<40		40	10	ug/L		05/03/16 09:31	05/05/16 03:42	10
3-Nitroaniline	<81		81	14	ug/L		05/03/16 09:31	05/05/16 03:42	10
4-Nitroaniline	<81		81	13	ug/L		05/03/16 09:31	05/05/16 03:42	10
Nitrobenzene	<8.1		8.1	3.6	ug/L		05/03/16 09:31	05/05/16 03:42	10
2-Nitrophenol	<81		81	20	ug/L		05/03/16 09:31	05/05/16 03:42	10
4-Nitrophenol	<160		160	60	ug/L		05/03/16 09:31	05/05/16 03:42	10
N-Nitrosodi-n-propylamine	<4.0		4.0	1.2	ug/L		05/03/16 09:31	05/05/16 03:42	10
N-Nitrosodiphenylamine	**15**	D	8.1	3.0	ug/L		05/03/16 09:31	05/05/16 03:42	10
2,2'-oxybis[1-chloropropane]	<16	UJ	16	3.1	ug/L		05/03/16 09:31	05/05/16 03:42	10
Pentachlorophenol	<160		160	32	ug/L		05/03/16 09:31	05/05/16 03:42	10
Phenanthrene	<8.1		8.1	2.4	ug/L		05/03/16 09:31	05/05/16 03:42	10
Phenol	**84**	JD	40	5.4	ug/L		05/03/16 09:31	05/05/16 03:42	10
Pyrene	<8.1		8.1	3.4	ug/L		05/03/16 09:31	05/05/16 03:42	10
2,4,5-Trichlorophenol	<81		81	21	ug/L		05/03/16 09:31	05/05/16 03:42	10
2,4,6-Trichlorophenol	<40		40	5.8	ug/L		05/03/16 09:31	05/05/16 03:42	10
Benzaldehyde	<160	UJ	160	120	ug/L		05/03/16 09:31	05/05/16 03:42	10
Caprolactam	<81		81	12	ug/L		05/03/16 09:31	05/05/16 03:42	10
Atrazine	<40		40	5.0	ug/L		05/03/16 09:31	05/05/16 03:42	10
1,1'-Biphenyl	**3.2**	J D	40	2.9	ug/L		05/03/16 09:31	05/05/16 03:42	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*30 - 123*	*05/03/16 09:31*	*05/05/16 03:42*	*10*
2-Fluorophenol (Surr)	*58*		*30 - 110*	*05/03/16 09:31*	*05/05/16 03:42*	*10*
Nitrobenzene-d5 (Surr)	*72*		*33 - 139*	*05/03/16 09:31*	*05/05/16 03:42*	*10*
Phenol-d5 (Surr)	*52*		*20 - 100*	*05/03/16 09:31*	*05/05/16 03:42*	*10*
Terphenyl-d14 (Surr)	*102*		*42 - 150*	*05/03/16 09:31*	*05/05/16 03:42*	*10*
2,4,6-Tribromophenol (Surr)	*139*		*30 - 150*	*05/03/16 09:31*	*05/05/16 03:42*	*10*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.20	UJ	0.20	0.027	ug/L		04/29/16 10:36	05/03/16 13:59	5
alpha-BHC	<0.20		0.20	0.013	ug/L		04/29/16 10:36	05/03/16 13:59	5
alpha-Chlordane	<0.20		0.20	0.022	ug/L		04/29/16 10:36	05/03/16 13:59	5
beta-BHC	<0.20		0.20	0.051	ug/L		04/29/16 10:36	05/03/16 13:59	5
4,4'-DDD	<0.20		0.20	0.067	ug/L		04/29/16 10:36	05/03/16 13:59	5
4,4'-DDE	<0.20		0.20	0.019	ug/L		04/29/16 10:36	05/03/16 13:59	5
4,4'-DDT	<0.20		0.20	0.016	ug/L		04/29/16 10:36	05/03/16 13:59	5

Client Sample ID: DUP-1(04282016)

Date Collected: 04/28/16 00:00
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-5

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	<0.20	UJ	0.20	0.052	ug/L		04/29/16 10:36	05/03/16 13:59	5
Dieldrin	<0.20		0.20	0.065	ug/L		04/29/16 10:36	05/03/16 13:59	5
Endosulfan I	<0.20		0.20	0.021	ug/L		04/29/16 10:36	05/03/16 13:59	5
Endosulfan II	<0.20		0.20	0.014	ug/L		04/29/16 10:36	05/03/16 13:59	5
Endosulfan sulfate	<0.20		0.20	0.059	ug/L		04/29/16 10:36	05/03/16 13:59	5
Endrin	<0.20		0.20	0.071	ug/L		04/29/16 10:36	05/03/16 13:59	5
Endrin aldehyde	<0.20		0.20	0.041	ug/L		04/29/16 10:36	05/03/16 13:59	5
Endrin ketone	<0.20		0.20	0.086	ug/L		04/29/16 10:36	05/03/16 13:59	5
gamma-BHC (Lindane)	<0.20		0.20	0.028	ug/L		04/29/16 10:36	05/03/16 13:59	5
gamma-Chlordane	<0.20		0.20	0.036	ug/L		04/29/16 10:36	05/03/16 13:59	5
Heptachlor	<0.20		0.20	0.068	ug/L		04/29/16 10:36	05/03/16 13:59	5
Heptachlor epoxide	<0.20		0.20	0.069	ug/L		04/29/16 10:36	05/03/16 13:59	5
Methoxychlor	<0.40		0.40	0.12	ug/L		04/29/16 10:36	05/03/16 13:59	5
Toxaphene	<2.0		2.0	1.0	ug/L		04/29/16 10:36	05/03/16 13:59	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*11*	*X*	*30 - 143*	*04/29/16 10:36*	*05/03/16 13:59*	*5*
Tetrachloro-m-xylene	*414*	*X*	*30 - 120*	*04/29/16 10:36*	*05/03/16 13:59*	*5*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<2.0		2.0	0.34	ug/L		04/29/16 10:36	05/04/16 11:00	5
PCB-1221	<2.0		2.0	1.0	ug/L		04/29/16 10:36	05/04/16 11:00	5
PCB-1232	<2.0		2.0	1.0	ug/L		04/29/16 10:36	05/04/16 11:00	5
PCB-1242	<2.0		2.0	1.0	ug/L		04/29/16 10:36	05/04/16 11:00	5
PCB-1248	<2.0		2.0	1.0	ug/L		04/29/16 10:36	05/04/16 11:00	5
PCB-1254	<2.0		2.0	1.0	ug/L		04/29/16 10:36	05/04/16 11:00	5
PCB-1260	<2.0		2.0	0.35	ug/L		04/29/16 10:36	05/04/16 11:00	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*89*		*30 - 127*	*04/29/16 10:36*	*05/04/16 11:00*	*5*
DCB Decachlorobiphenyl	*48*		*30 - 150*	*04/29/16 10:36*	*05/04/16 11:00*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.066**	**J**	0.20	0.062	mg/L		04/29/16 08:31	04/29/16 19:53	1
Antimony	<0.020		0.020	0.0064	mg/L		04/29/16 08:31	04/29/16 19:53	1
Arsenic	**0.0075**	**J**	0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:53	1
Barium	**0.25**		0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:53	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		04/29/16 08:31	04/29/16 19:53	1
Cadmium	<0.0020		0.0020	0.00094	mg/L		04/29/16 08:31	04/29/16 19:53	1
Calcium	**120**		0.20	0.059	mg/L		04/29/16 08:31	04/29/16 19:53	1
Chromium	**0.0045**	**J**	0.010	0.0024	mg/L		04/29/16 08:31	04/29/16 19:53	1
Cobalt	**0.0026**	**J**	0.0050	0.00096	mg/L		04/29/16 08:31	04/29/16 19:53	1
Copper	**0.0025**	**J**	0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:53	1
Iron	**7.3**		0.20	0.10	mg/L		04/29/16 08:31	04/29/16 19:53	1
Lead	**0.0029**	**J**	0.0050	0.0024	mg/L		04/29/16 08:31	05/03/16 18:16	1
Magnesium	**43**		0.10	0.034	mg/L		04/29/16 08:31	04/29/16 19:53	1
Manganese	**0.35**		0.010	0.0034	mg/L		04/29/16 08:31	04/29/16 19:53	1
Nickel	**0.011**		0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:53	1

Client Sample ID: DUP-1(04282016)

Date Collected: 04/28/16 00:00
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-5

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	68		0.50	0.16	mg/L		04/29/16 08:31	04/29/16 19:53	1
Selenium	0.0059	J	0.010	0.0046	mg/L		04/29/16 08:31	04/29/16 19:53	1
Silver	<0.0050		0.0050	0.0013	mg/L		04/29/16 08:31	04/29/16 19:53	1
Sodium	240		1.0	0.43	mg/L		04/29/16 08:31	04/29/16 19:53	1
Thallium	<0.010		0.010	0.0028	mg/L		04/29/16 08:31	04/29/16 19:53	1
Vanadium	0.0039	J	0.0050	0.0019	mg/L		04/29/16 08:31	04/29/16 19:53	1
Zinc	<0.020		0.020	0.0090	mg/L		04/29/16 08:31	04/29/16 19:53	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		04/29/16 08:31	04/29/16 19:58	1
Antimony	<0.020		0.020	0.0064	mg/L		04/29/16 08:31	04/29/16 19:58	1
Arsenic	0.0085	J	0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:58	1
Barium	0.25		0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:58	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		04/29/16 08:31	04/29/16 19:58	1
Cadmium	<0.0020		0.0020	0.00094	mg/L		04/29/16 08:31	04/29/16 19:58	1
Calcium	110		0.20	0.059	mg/L		04/29/16 08:31	04/29/16 19:58	1
Chromium	0.0045	J	0.010	0.0024	mg/L		04/29/16 08:31	04/29/16 19:58	1
Cobalt	0.0025	J	0.0050	0.00096	mg/L		04/29/16 08:31	04/29/16 19:58	1
Copper	<0.010		0.010	0.0022	mg/L		04/29/16 08:31	04/29/16 19:58	1
Iron	7.5		0.20	0.10	mg/L		04/29/16 08:31	04/29/16 19:58	1
Lead	<0.0050		0.0050	0.0024	mg/L		04/29/16 08:31	05/03/16 18:22	1
Magnesium	46		0.10	0.034	mg/L		04/29/16 08:31	04/29/16 19:58	1
Manganese	0.37		0.010	0.0034	mg/L		04/29/16 08:31	04/29/16 19:58	1
Nickel	0.011		0.010	0.0031	mg/L		04/29/16 08:31	04/29/16 19:58	1
Potassium	71		0.50	0.16	mg/L		04/29/16 08:31	04/29/16 19:58	1
Selenium	0.0077	J	0.010	0.0046	mg/L		04/29/16 08:31	04/29/16 19:58	1
Silver	<0.0050		0.0050	0.0013	mg/L		04/29/16 08:31	04/29/16 19:58	1
Sodium	240		1.0	0.43	mg/L		04/29/16 08:31	04/29/16 19:58	1
Thallium	<0.010		0.010	0.0028	mg/L		04/29/16 08:31	04/29/16 19:58	1
Vanadium	0.0036	J	0.0050	0.0019	mg/L		04/29/16 08:31	04/29/16 19:58	1
Zinc	<0.020		0.020	0.0090	mg/L		04/29/16 08:31	04/29/16 19:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/02/16 13:45	05/04/16 14:42	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/02/16 13:45	05/04/16 14:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.7		1.0	0.22	mg/L			05/03/16 05:35	1
Sulfate	150		50	20	mg/L			05/06/16 09:16	10
Total Organic Carbon - Duplicates	56		2.0	0.46	mg/L			05/10/16 00:36	2
Nitrogen, Nitrate	<0.10		0.10	0.045	mg/L			05/03/16 14:20	1
Total Suspended Solids	26	J	5.0	1.6	mg/L			05/03/16 11:37	1
Ammonia	52	B	5.0	1.1	mg/L		05/09/16 19:05	05/09/16 22:23	25
Nitrogen, Nitrite	< 0.020 ~~0.010~~ ~~J B~~ UB		0.020	0.0032	mg/L			04/29/16 14:53	1

Client: ARCADIS U.S., Inc.
Project/Site: Lake Calumet Cluster Site

TestAmerica Job ID: 500-110872-1

Client Sample ID: DUP-1(04282016)
Date Collected: 04/28/16 00:00
Date Received: 04/28/16 16:05

Lab Sample ID: 500-110872-5
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	<0.10		0.10	0.045	mg/L			05/02/16 19:28	1

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # 500-110948

Send Results to:

Contact & Company Name: Arcadis

Telephone: 312 575 3772

Address: 120 S. LaSalle St. Suite 1350 Chicago, IL

Fax:

City State Zip

E-mail Address: ellyn.gates@arcadis.com

Project Name/Location (City, State): LCCS (Chicago, IL)

Project #: CI001805.0002.00005

Sampler's Printed Name: Nicholas Icks

Sampler's Signature:

Preservative	E	E	C	C	A	A	
Filtered (✓)				✓			
# of Containers	6		1	1	1		9
Container Information							

Keys

Preservation Key:
A. H_2SO_4
B. HCl
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: _____

PARAMETER ANALYSIS & METHOD

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	8270D (MOD) List 4.2	8082A	8081B	7470A Mercury 6010C TAL Metals - Hg	7470A Mercury 6010C TAL Metals - Hg (Dissolved)	SM4500-NH3-G Ammonia	SM4500-NO3-F Nitrogen, Nitrate, Nitrite	See "Special Instructions"
1	MW-2-GW-04282016	4-28-16	1617		✓	W	X	X	X	X	X	X	X	
2	MW-10-GW-04292016	4-29-16	0707		✓	W	X	X	X	X	X	X	X	
3	MW-6-GW-04292016		0847		✓	W	X	X	X	X	X	X	X	
4	MW-7-GW-04292016		1047		✓	W	X	X	X	X	X	X	X	
5	MW-9-GW-04292016		1227		✓	W	X	X	X	X	X	X	X	
6	MW-8-GW-04292016		1402		✓	W	X	X	X	X	X	X	X	
7	DUP-2 (04292016)		—		✓	W	X	X	X	X	X	X	X	

REMARKS

500-110948 COC

Special Instructions/Comments: 9034_Calc-Sulfide; 8260B-Target Compound List 4,2; 9060A-(MOD) Local Method; SM4500_NO2_B-Nitrogen, Nitrite; 9038-Sulfate; 2540D-Total Suspended Solids

☐ Special QA/QC Instructions(✓):

* Level IV Data Package

Laboratory Information and Receipt

Lab Name: TestAmerica Chicago

☒ Cooler packed with ice (✓)

Cooler Custody Seal (✓): ☒ Intact ☐ Not Intact

Specify Turnaround Requirements:

Sample Receipt:

Shipping Tracking #:

Condition/Cooler Temp: 3.3, 3.6, 3.1

Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name: Nicholas Icks	Printed Name: David Beckner	Printed Name: David Beckner	Printed Name: Ariel Sanchez
Signature:	Signature: David Beckner	Signature: David Beckner	Signature:
Firm: Arcadis	Firm/Courier: TA	Firm/Courier: TA	Firm: TA-Chicago
Date/Time: 4-29-16 1617	Date/Time: 4-29-16 1617	Date/Time: 4/29/16 17:05	Date/Time: 04/29/16 17:05

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

Client Sample ID: MW-2-GW-04282016

Date Collected: 04/28/16 16:17
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<5.0		5.0	1.7	ug/L			05/12/16 05:28	1
Benzene	**14**		0.50	0.15	ug/L			05/12/16 05:28	1
Bromodichloromethane	<1.0		1.0	0.37	ug/L			05/12/16 05:28	1
Bromoform	<1.0	UJ	1.0	0.48	ug/L			05/12/16 05:28	1
Bromomethane	<2.0		2.0	0.80	ug/L			05/12/16 05:28	1
Carbon disulfide	<2.0		2.0	0.45	ug/L			05/12/16 05:28	1
Carbon tetrachloride	<1.0		1.0	0.38	ug/L			05/12/16 05:28	1
Chloroethane	**4.8**		1.0	0.51	ug/L			05/12/16 05:28	1
Chloroform	<1.0		1.0	0.37	ug/L			05/12/16 05:28	1
Chloromethane	<1.0	UJ	1.0	0.32	ug/L			05/12/16 05:28	1
cis-1,2-Dichloroethene	<1.0		1.0	0.41	ug/L			05/12/16 05:28	1
cis-1,3-Dichloropropene	<1.0		1.0	0.42	ug/L			05/12/16 05:28	1
Cyclohexane	<1.0		1.0	0.49	ug/L			05/12/16 05:28	1
Dibromochloromethane	<1.0	UJ	1.0	0.49	ug/L			05/12/16 05:28	1
1,2-Dibromo-3-Chloropropane	<5.0	UJ	5.0	2.0	ug/L			05/12/16 05:28	1
1,2-Dibromoethane	<1.0		1.0	0.39	ug/L			05/12/16 05:28	1
1,2-Dichlorobenzene	**24**		1.0	0.33	ug/L			05/12/16 05:28	1
1,3-Dichlorobenzene	**5.6**		1.0	0.40	ug/L			05/12/16 05:28	1
1,4-Dichlorobenzene	**23**		1.0	0.36	ug/L			05/12/16 05:28	1
Dichlorodifluoromethane	<2.0	UJ	2.0	0.67	ug/L			05/12/16 05:28	1
1,1-Dichloroethane	<1.0		1.0	0.41	ug/L			05/12/16 05:28	1
1,2-Dichloroethane	<1.0		1.0	0.39	ug/L			05/12/16 05:28	1
1,1-Dichloroethene	<1.0		1.0	0.39	ug/L			05/12/16 05:28	1
1,2-Dichloropropane	<1.0		1.0	0.43	ug/L			05/12/16 05:28	1
Ethylbenzene	**2.2**		0.50	0.18	ug/L			05/12/16 05:28	1
2-Hexanone	<5.0	UJ	5.0	1.6	ug/L			05/12/16 05:28	1
Isopropylbenzene	**5.3**		1.0	0.39	ug/L			05/12/16 05:28	1
Methyl acetate	**20**		5.0	2.0	ug/L			05/12/16 05:28	1
Methylcyclohexane	<1.0		1.0	0.32	ug/L			05/12/16 05:28	1
Methylene Chloride	<5.0		5.0	1.6	ug/L			05/12/16 05:28	1
Methyl Ethyl Ketone	<5.0	UJ	5.0	2.1	ug/L			05/12/16 05:28	1
methyl isobutyl ketone	<5.0	UJ	5.0	2.2	ug/L			05/12/16 05:28	1
Methyl tert-butyl ether	<1.0		1.0	0.39	ug/L			05/12/16 05:28	1
Styrene	<1.0		1.0	0.39	ug/L			05/12/16 05:28	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.40	ug/L			05/12/16 05:28	1
Tetrachloroethene	<1.0		1.0	0.37	ug/L			05/12/16 05:28	1
Toluene	**1.3**		0.50	0.15	ug/L			05/12/16 05:28	1
trans-1,2-Dichloroethene	<1.0		1.0	0.35	ug/L			05/12/16 05:28	1
trans-1,3-Dichloropropene	<1.0		1.0	0.36	ug/L			05/12/16 05:28	1
1,2,4-Trichlorobenzene	<1.0		1.0	0.34	ug/L			05/12/16 05:28	1
1,1,1-Trichloroethane	<1.0		1.0	0.38	ug/L			05/12/16 05:28	1
1,1,2-Trichloroethane	<1.0		1.0	0.35	ug/L			05/12/16 05:28	1
Trichloroethene	<0.50		0.50	0.16	ug/L			05/12/16 05:28	1
Trichlorofluoromethane	<1.0		1.0	0.43	ug/L			05/12/16 05:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0	0.46	ug/L			05/12/16 05:28	1
Vinyl chloride	<0.50		0.50	0.20	ug/L			05/12/16 05:28	1
Xylenes, Total	**6.2**		1.0	0.22	ug/L			05/12/16 05:28	1

Client Sample ID: MW-2-GW-04282016

Date Collected: 04/28/16 16:17
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*71 - 120*		*05/12/16 05:28*	*1*
Dibromofluoromethane	*99*		*70 - 120*		*05/12/16 05:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*71 - 127*		*05/12/16 05:28*	*1*
Toluene-d8 (Surr)	*99*		*75 - 120*		*05/12/16 05:28*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	**660**	D	5.0	1.9	ug/L			05/12/16 05:55	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*71 - 120*		*05/12/16 05:55*	*5*
Dibromofluoromethane	*99*		*70 - 120*		*05/12/16 05:55*	*5*
1,2-Dichloroethane-d4 (Surr)	*99*		*71 - 127*		*05/12/16 05:55*	*5*
Toluene-d8 (Surr)	*98*		*75 - 120*		*05/12/16 05:55*	*5*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**1.1**		0.83	0.26	ug/L		05/05/16 08:14	05/13/16 09:00	1
Acenaphthylene	<0.83		0.83	0.22	ug/L		05/05/16 08:14	05/13/16 09:00	1
Acetophenone	<4.1		4.1	0.55	ug/L		05/05/16 08:14	05/13/16 09:00	1
Anthracene	<0.83		0.83	0.28	ug/L		05/05/16 08:14	05/13/16 09:00	1
Benzo[a]anthracene	<0.17		0.17	0.047	ug/L		05/05/16 08:14	05/13/16 09:00	1
Benzo[a]pyrene	<0.17		0.17	0.082	ug/L		05/05/16 08:14	05/13/16 09:00	1
Benzo[b]fluoranthene	<0.17		0.17	0.067	ug/L		05/05/16 08:14	05/13/16 09:00	1
Benzo[g,h,i]perylene	<0.83		0.83	0.31	ug/L		05/05/16 08:14	05/13/16 09:00	1
Benzo[k]fluoranthene	<0.17		0.17	0.053	ug/L		05/05/16 08:14	05/13/16 09:00	1
Bis(2-chloroethoxy)methane	<1.7		1.7	0.24	ug/L		05/05/16 08:14	05/13/16 09:00	1
Bis(2-chloroethyl)ether	**0.97**	J	1.7	0.24	ug/L		05/05/16 08:14	05/13/16 09:00	1
Bis(2-ethylhexyl) phthalate	**2.0**	J	8.3	1.4	ug/L		05/05/16 08:14	05/13/16 09:00	1
4-Bromophenyl phenyl ether	<4.1		4.1	0.45	ug/L		05/05/16 08:14	05/13/16 09:00	1
Butyl benzyl phthalate	<1.7		1.7	0.40	ug/L		05/05/16 08:14	05/13/16 09:00	1
Carbazole	<4.1		4.1	0.29	ug/L		05/05/16 08:14	05/13/16 09:00	1
4-Chloroaniline	<8.3	UJ	8.3	1.7	ug/L		05/05/16 08:14	05/13/16 09:00	1
4-Chloro-3-methylphenol	<8.3		8.3	1.9	ug/L		05/05/16 08:14	05/13/16 09:00	1
2-Chloronaphthalene	<1.7		1.7	0.19	ug/L		05/05/16 08:14	05/13/16 09:00	1
2-Chlorophenol	**5.8**		4.1	0.46	ug/L		05/05/16 08:14	05/13/16 09:00	1
4-Chlorophenyl phenyl ether	<4.1		4.1	0.53	ug/L		05/05/16 08:14	05/13/16 09:00	1
Chrysene	<0.41		0.41	0.056	ug/L		05/05/16 08:14	05/13/16 09:00	1
Dibenz(a,h)anthracene	<0.25		0.25	0.042	ug/L		05/05/16 08:14	05/13/16 09:00	1
Dibenzofuran	<1.7		1.7	0.22	ug/L		05/05/16 08:14	05/13/16 09:00	1
3,3'-Dichlorobenzidine	<4.1		4.1	1.4	ug/L		05/05/16 08:14	05/13/16 09:00	1
2,4-Dichlorophenol	<8.3		8.3	2.2	ug/L		05/05/16 08:14	05/13/16 09:00	1
Diethyl phthalate	**0.50**	J	1.7	0.30	ug/L		05/05/16 08:14	05/13/16 09:00	1
2,4-Dimethylphenol	<8.3	UJ	8.3	1.5	ug/L		05/05/16 08:14	05/13/16 09:00	1
Dimethyl phthalate	<1.7		1.7	0.26	ug/L		05/05/16 08:14	05/13/16 09:00	1
Di-n-butyl phthalate	**1.9**	J	4.1	0.61	ug/L		05/05/16 08:14	05/13/16 09:00	1
4,6-Dinitro-2-methylphenol	<17		17	4.9	ug/L		05/05/16 08:14	05/13/16 09:00	1
2,4-Dinitrophenol	<17		17	7.1	ug/L		05/05/16 08:14	05/13/16 09:00	1
2,4-Dinitrotoluene	<0.83		0.83	0.20	ug/L		05/05/16 08:14	05/13/16 09:00	1
2,6-Dinitrotoluene	<0.41		0.41	0.061	ug/L		05/05/16 08:14	05/13/16 09:00	1
Di-n-octyl phthalate	<8.3		8.3	0.87	ug/L		05/05/16 08:14	05/13/16 09:00	1

Client Sample ID: MW-2-GW-04282016

Date Collected: 04/28/16 16:17
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-1

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.83		0.83	0.38	ug/L		05/05/16 08:14	05/13/16 09:00	1
Fluorene	**0.59**	**J**	0.83	0.20	ug/L		05/05/16 08:14	05/13/16 09:00	1
Hexachlorobenzene	<0.41		0.41	0.066	ug/L		05/05/16 08:14	05/13/16 09:00	1
Hexachlorobutadiene	<4.1		4.1	0.43	ug/L		05/05/16 08:14	05/13/16 09:00	1
Hexachlorocyclopentadiene	<17		17	5.3	ug/L		05/05/16 08:14	05/13/16 09:00	1
Hexachloroethane	<4.1		4.1	0.50	ug/L		05/05/16 08:14	05/13/16 09:00	1
Indeno[1,2,3-cd]pyrene	<0.17		0.17	0.062	ug/L		05/05/16 08:14	05/13/16 09:00	1
Isophorone	<1.7		1.7	0.31	ug/L		05/05/16 08:14	05/13/16 09:00	1
2-Methylphenol	<1.7		1.7	0.25	ug/L		05/05/16 08:14	05/13/16 09:00	1
3 & 4 Methylphenol	**6.8**		1.7	0.37	ug/L		05/05/16 08:14	05/13/16 09:00	1
2-Nitroaniline	<4.1		4.1	1.1	ug/L		05/05/16 08:14	05/13/16 09:00	1
3-Nitroaniline	<8.3		8.3	1.5	ug/L		05/05/16 08:14	05/13/16 09:00	1
4-Nitroaniline	<8.3		8.3	1.4	ug/L		05/05/16 08:14	05/13/16 09:00	1
Nitrobenzene	<0.83		0.83	0.37	ug/L		05/05/16 08:14	05/13/16 09:00	1
2-Nitrophenol	<8.3		8.3	2.1	ug/L		05/05/16 08:14	05/13/16 09:00	1
4-Nitrophenol	<17		17	6.2	ug/L		05/05/16 08:14	05/13/16 09:00	1
N-Nitrosodi-n-propylamine	<0.41		0.41	0.13	ug/L		05/05/16 08:14	05/13/16 09:00	1
N-Nitrosodiphenylamine	**4.0**		0.83	0.31	ug/L		05/05/16 08:14	05/13/16 09:00	1
2,2'-oxybis[1-chloropropane]	<1.7		1.7	0.32	ug/L		05/05/16 08:14	05/13/16 09:00	1
Pentachlorophenol	<17		17	3.3	ug/L		05/05/16 08:14	05/13/16 09:00	1
Phenanthrene	**0.33**	**J**	0.83	0.25	ug/L		05/05/16 08:14	05/13/16 09:00	1
Phenol	<4.1		4.1	0.56	ug/L		05/05/16 08:14	05/13/16 09:00	1
Pyrene	<0.83		0.83	0.35	ug/L		05/05/16 08:14	05/13/16 09:00	1
2,4,5-Trichlorophenol	<8.3		8.3	2.1	ug/L		05/05/16 08:14	05/13/16 09:00	1
2,4,6-Trichlorophenol	<4.1		4.1	0.59	ug/L		05/05/16 08:14	05/13/16 09:00	1
Benzaldehyde	~~<17~~ *	R	~~17~~	~~13~~	~~ug/L~~		05/05/16 08:14	05/13/16 09:00	1
Caprolactam	<8.3		8.3	1.2	ug/L		05/05/16 08:14	05/13/16 09:00	1
Atrazine	<4.1		4.1	0.52	ug/L		05/05/16 08:14	05/13/16 09:00	1
1,1'-Biphenyl	**0.70**	**J**	4.1	0.30	ug/L		05/05/16 08:14	05/13/16 09:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*30 - 123*	*05/05/16 08:14*	*05/13/16 09:00*	*1*
2-Fluorophenol (Surr)	*60*		*30 - 110*	*05/05/16 08:14*	*05/13/16 09:00*	*1*
Nitrobenzene-d5 (Surr)	*69*		*33 - 139*	*05/05/16 08:14*	*05/13/16 09:00*	*1*
Phenol-d5 (Surr)	*46*		*20 - 100*	*05/05/16 08:14*	*05/13/16 09:00*	*1*
Terphenyl-d14 (Surr)	*99*		*42 - 150*	*05/05/16 08:14*	*05/13/16 09:00*	*1*
2,4,6-Tribromophenol (Surr)	*86*		*30 - 150*	*05/05/16 08:14*	*05/13/16 09:00*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**120**	D	4.1	0.54	ug/L		05/05/16 08:14	05/13/16 00:51	10
Naphthalene	**90**	D	8.3	2.6	ug/L		05/05/16 08:14	05/13/16 00:51	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*30 - 123*	*05/05/16 08:14*	*05/13/16 00:51*	*10*
2-Fluorophenol (Surr)	*60*		*30 - 110*	*05/05/16 08:14*	*05/13/16 00:51*	*10*
Nitrobenzene-d5 (Surr)	*84*		*33 - 139*	*05/05/16 08:14*	*05/13/16 00:51*	*10*
Phenol-d5 (Surr)	*51*		*20 - 100*	*05/05/16 08:14*	*05/13/16 00:51*	*10*
Terphenyl-d14 (Surr)	*118*		*42 - 150*	*05/05/16 08:14*	*05/13/16 00:51*	*10*
2,4,6-Tribromophenol (Surr)	*98*		*30 - 150*	*05/05/16 08:14*	*05/13/16 00:51*	*10*

Client Sample ID: MW-2-GW-04282016

Date Collected: 04/28/16 16:17
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-1

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.042		0.042	0.0055	ug/L		05/02/16 16:20	05/03/16 15:35	1
alpha-BHC	<0.042		0.042	0.0027	ug/L		05/02/16 16:20	05/03/16 15:35	1
alpha-Chlordane	<0.042		0.042	0.0046	ug/L		05/02/16 16:20	05/03/16 15:35	1
beta-BHC	<0.042		0.042	0.011	ug/L		05/02/16 16:20	05/03/16 15:35	1
4,4'-DDD	<0.042		0.042	0.014	ug/L		05/02/16 16:20	05/03/16 15:35	1
4,4'-DDE	<0.042		0.042	0.0039	ug/L		05/02/16 16:20	05/03/16 15:35	1
4,4'-DDT	<0.042		0.042	0.0033	ug/L		05/02/16 16:20	05/03/16 15:35	1
delta-BHC	<0.042		0.042	0.011	ug/L		05/02/16 16:20	05/03/16 15:35	1
Dieldrin	<0.042		0.042	0.013	ug/L		05/02/16 16:20	05/03/16 15:35	1
Endosulfan I	<0.042		0.042	0.0043	ug/L		05/02/16 16:20	05/03/16 15:35	1
Endosulfan II	<0.042		0.042	0.0029	ug/L		05/02/16 16:20	05/03/16 15:35	1
Endosulfan sulfate	<0.042		0.042	0.012	ug/L		05/02/16 16:20	05/03/16 15:35	1
Endrin	<0.042		0.042	0.015	ug/L		05/02/16 16:20	05/03/16 15:35	1
Endrin aldehyde	<0.042		0.042	0.0085	ug/L		05/02/16 16:20	05/03/16 15:35	1
Endrin ketone	<0.042		0.042	0.018	ug/L		05/02/16 16:20	05/03/16 15:35	1
gamma-BHC (Lindane)	<0.042		0.042	0.0058	ug/L		05/02/16 16:20	05/03/16 15:35	1
gamma-Chlordane	<0.042		0.042	0.0075	ug/L		05/02/16 16:20	05/03/16 15:35	1
Heptachlor	<0.042		0.042	0.014	ug/L		05/02/16 16:20	05/03/16 15:35	1
Heptachlor epoxide	<0.042		0.042	0.014	ug/L		05/02/16 16:20	05/03/16 15:35	1
Methoxychlor	<0.083		0.083	0.024	ug/L		05/02/16 16:20	05/03/16 15:35	1
Toxaphene	<0.42		0.42	0.21	ug/L		05/02/16 16:20	05/03/16 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*82*		*30 - 143*	*05/02/16 16:20*	*05/03/16 15:35*	*1*
Tetrachloro-m-xylene	*142*	*X*	*30 - 120*	*05/02/16 16:20*	*05/03/16 15:35*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.42		0.42	0.070	ug/L		05/02/16 16:20	05/03/16 17:06	1
PCB-1221	<0.42		0.42	0.21	ug/L		05/02/16 16:20	05/03/16 17:06	1
PCB-1232	<0.42		0.42	0.21	ug/L		05/02/16 16:20	05/03/16 17:06	1
PCB-1242	<0.42		0.42	0.21	ug/L		05/02/16 16:20	05/03/16 17:06	1
PCB-1248	<0.42		0.42	0.21	ug/L		05/02/16 16:20	05/03/16 17:06	1
PCB-1254	<0.42		0.42	0.21	ug/L		05/02/16 16:20	05/03/16 17:06	1
PCB-1260	<0.42		0.42	0.073	ug/L		05/02/16 16:20	05/03/16 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*30 - 127*	*05/02/16 16:20*	*05/03/16 17:06*	*1*
DCB Decachlorobiphenyl	*75*		*30 - 150*	*05/02/16 16:20*	*05/03/16 17:06*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		05/02/16 09:28	05/03/16 18:49	1
Antimony	<0.020		0.020	0.0064	mg/L		05/02/16 09:28	05/03/16 18:49	1
Arsenic	<0.010		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 18:49	1
Barium	**0.30**		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 18:49	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		05/02/16 09:28	05/03/16 18:49	1
Cadmium	**0.0012**	**J**	0.0020	0.00094	mg/L		05/02/16 09:28	05/03/16 18:49	1
Calcium	**100**	**J** J	0.20	0.059	mg/L		05/02/16 09:28	05/03/16 18:49	1
Chromium	**0.0026**	**J**	0.010	0.0024	mg/L		05/02/16 09:28	05/03/16 18:49	1

Client Sample ID: MW-2-GW-04282016

Date Collected: 04/28/16 16:17
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-1

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.0050		0.0050	0.00096	mg/L		05/02/16 09:28	05/03/16 18:49	1
Copper	<0.010		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 18:49	1
Iron	**37**	~~V~~ J	0.20	0.10	mg/L		05/02/16 09:28	05/03/16 18:49	1
Lead	**0.0034**	J	0.0050	0.0024	mg/L		05/02/16 09:28	05/03/16 18:49	1
Magnesium	**52**		0.10	0.034	mg/L		05/02/16 09:28	05/03/16 18:49	1
Manganese	**0.39**	~~V~~	0.010	0.0034	mg/L		05/02/16 09:28	05/03/16 18:49	1
Nickel	**0.0046**	J	0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 18:49	1
Potassium	**33**		0.50	0.16	mg/L		05/02/16 09:28	05/03/16 18:49	1
Selenium	<0.010		0.010	0.0046	mg/L		05/02/16 09:28	05/03/16 18:49	1
Silver	<0.0050		0.0050	0.0013	mg/L		05/02/16 09:28	05/03/16 18:49	1
Sodium	**150**		1.0	0.43	mg/L		05/02/16 09:28	05/03/16 18:49	1
Thallium	<0.010		0.010	0.0028	mg/L		05/02/16 09:28	05/03/16 18:49	1
Vanadium	<0.0050		0.0050	0.0019	mg/L		05/02/16 09:28	05/03/16 18:49	1
Zinc	**0.093**		0.020	0.0090	mg/L		05/02/16 09:28	05/03/16 18:49	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		05/02/16 09:28	05/03/16 18:58	1
Antimony	<0.020		0.020	0.0064	mg/L		05/02/16 09:28	05/03/16 18:58	1
Arsenic	<0.010		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 18:58	1
Barium	**0.32**		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 18:58	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		05/02/16 09:28	05/03/16 18:58	1
Cadmium	**0.0014**	J	0.0020	0.00094	mg/L		05/02/16 09:28	05/03/16 18:58	1
Calcium	**110**	J	0.20	0.059	mg/L		05/02/16 09:28	05/03/16 18:58	1
Chromium	**0.0027**	J	0.010	0.0024	mg/L		05/02/16 09:28	05/03/16 18:58	1
Cobalt	<0.0050		0.0050	0.00096	mg/L		05/02/16 09:28	05/03/16 18:58	1
Copper	<0.010		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 18:58	1
Iron	**40**	J	0.20	0.10	mg/L		05/02/16 09:28	05/03/16 18:58	1
Lead	<0.0050	UJ	0.0050	0.0024	mg/L		05/02/16 09:28	05/03/16 18:58	1
Magnesium	**57**		0.10	0.034	mg/L		05/02/16 09:28	05/03/16 18:58	1
Manganese	**0.41**		0.010	0.0034	mg/L		05/02/16 09:28	05/03/16 18:58	1
Nickel	**0.0039**	J	0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 18:58	1
Potassium	**36**		0.50	0.16	mg/L		05/02/16 09:28	05/03/16 18:58	1
Selenium	<0.010		0.010	0.0046	mg/L		05/02/16 09:28	05/03/16 18:58	1
Silver	<0.0050		0.0050	0.0013	mg/L		05/02/16 09:28	05/03/16 18:58	1
Sodium	**170**		1.0	0.43	mg/L		05/02/16 09:28	05/03/16 18:58	1
Thallium	<0.010		0.010	0.0028	mg/L		05/02/16 09:28	05/03/16 18:58	1
Vanadium	<0.0050		0.0050	0.0019	mg/L		05/02/16 09:28	05/03/16 18:58	1
Zinc	**0.086**	J	0.020	0.0090	mg/L		05/02/16 09:28	05/03/16 18:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/04/16 15:00	05/05/16 11:00	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/04/16 15:00	05/05/16 11:25	1

Client Sample ID: MW-2-GW-04282016

Date Collected: 04/28/16 16:17
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-1

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<1.0		1.0	0.22	mg/L			05/03/16 05:38	1
Sulfate	<5.0		5.0	2.0	mg/L			05/06/16 09:17	1
Total Organic Carbon - Duplicates	**21**		1.0	0.23	mg/L			05/13/16 22:17	1
Nitrogen, Nitrate	<0.10		0.10	0.045	mg/L			05/13/16 15:09	1
Total Suspended Solids	**77**		5.0	1.6	mg/L			05/03/16 11:44	1
Ammonia	**43**	**B**	4.0	0.86	mg/L		05/11/16 18:12	05/12/16 19:17	20
Nitrogen, Nitrite	**0.0055**	**J**	0.020	0.0032	mg/L			04/30/16 12:19	1
Nitrogen, Nitrate Nitrite	<0.10		0.10	0.045	mg/L			05/12/16 09:32	1

Client Sample ID: MW-10-GW-04292016

Date Collected: 04/29/16 07:07
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<5.0		5.0	1.7	ug/L			05/12/16 18:46	1
Benzene	**0.40**	**J**	0.50	0.15	ug/L			05/12/16 18:46	1
Bromodichloromethane	<1.0		1.0	0.37	ug/L			05/12/16 18:46	1
Bromoform	<1.0	UJ	1.0	0.48	ug/L			05/12/16 18:46	1
Bromomethane	<2.0		2.0	0.80	ug/L			05/12/16 18:46	1
Carbon disulfide	<2.0		2.0	0.45	ug/L			05/12/16 18:46	1
Carbon tetrachloride	<1.0		1.0	0.38	ug/L			05/12/16 18:46	1
Chlorobenzene	**0.71**	**J**	1.0	0.39	ug/L			05/12/16 18:46	1
Chloroethane	<1.0		1.0	0.51	ug/L			05/12/16 18:46	1
Chloroform	<1.0		1.0	0.37	ug/L			05/12/16 18:46	1
Chloromethane	<1.0		1.0	0.32	ug/L			05/12/16 18:46	1
cis-1,2-Dichloroethene	<1.0		1.0	0.41	ug/L			05/12/16 18:46	1
cis-1,3-Dichloropropene	<1.0		1.0	0.42	ug/L			05/12/16 18:46	1
Cyclohexane	<1.0		1.0	0.49	ug/L			05/12/16 18:46	1
Dibromochloromethane	<1.0		1.0	0.49	ug/L			05/12/16 18:46	1
1,2-Dibromo-3-Chloropropane	<5.0	UJ	5.0	2.0	ug/L			05/12/16 18:46	1
1,2-Dibromoethane	<1.0		1.0	0.39	ug/L			05/12/16 18:46	1
1,2-Dichlorobenzene	<1.0		1.0	0.33	ug/L			05/12/16 18:46	1
1,3-Dichlorobenzene	<1.0		1.0	0.40	ug/L			05/12/16 18:46	1
1,4-Dichlorobenzene	<1.0		1.0	0.36	ug/L			05/12/16 18:46	1
Dichlorodifluoromethane	<2.0		2.0	0.67	ug/L			05/12/16 18:46	1
1,1-Dichloroethane	<1.0		1.0	0.41	ug/L			05/12/16 18:46	1
1,2-Dichloroethane	<1.0		1.0	0.39	ug/L			05/12/16 18:46	1
1,1-Dichloroethene	<1.0		1.0	0.39	ug/L			05/12/16 18:46	1
1,2-Dichloropropane	<1.0		1.0	0.43	ug/L			05/12/16 18:46	1
Ethylbenzene	<0.50		0.50	0.18	ug/L			05/12/16 18:46	1
2-Hexanone	<5.0	UJ	5.0	1.6	ug/L			05/12/16 18:46	1
Isopropylbenzene	<1.0		1.0	0.39	ug/L			05/12/16 18:46	1
Methyl acetate	<5.0		5.0	2.0	ug/L			05/12/16 18:46	1
Methylcyclohexane	<1.0		1.0	0.32	ug/L			05/12/16 18:46	1
Methylene Chloride	<5.0		5.0	1.6	ug/L			05/12/16 18:46	1
Methyl Ethyl Ketone	<5.0	UJ	5.0	2.1	ug/L			05/12/16 18:46	1
methyl isobutyl ketone	<5.0	UJ	5.0	2.2	ug/L			05/12/16 18:46	1
Methyl tert-butyl ether	<1.0		1.0	0.39	ug/L			05/12/16 18:46	1
Styrene	<1.0		1.0	0.39	ug/L			05/12/16 18:46	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.40	ug/L			05/12/16 18:46	1
Tetrachloroethene	<1.0		1.0	0.37	ug/L			05/12/16 18:46	1
Toluene	**0.29**	**J**	0.50	0.15	ug/L			05/12/16 18:46	1
trans-1,2-Dichloroethene	<1.0		1.0	0.35	ug/L			05/12/16 18:46	1
trans-1,3-Dichloropropene	<1.0		1.0	0.36	ug/L			05/12/16 18:46	1
1,2,4-Trichlorobenzene	<1.0		1.0	0.34	ug/L			05/12/16 18:46	1
1,1,1-Trichloroethane	<1.0		1.0	0.38	ug/L			05/12/16 18:46	1
1,1,2-Trichloroethane	<1.0		1.0	0.35	ug/L			05/12/16 18:46	1
Trichloroethene	<0.50		0.50	0.16	ug/L			05/12/16 18:46	1
Trichlorofluoromethane	<1.0		1.0	0.43	ug/L			05/12/16 18:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0	0.46	ug/L			05/12/16 18:46	1
Vinyl chloride	<0.50		0.50	0.20	ug/L			05/12/16 18:46	1
Xylenes, Total	<1.0		1.0	0.22	ug/L			05/12/16 18:46	1

Client Sample ID: MW-10-GW-04292016

Date Collected: 04/29/16 07:07
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-2

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*98*		*71 - 120*		*05/12/16 18:46*	*1*
Dibromofluoromethane	*96*		*70 - 120*		*05/12/16 18:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*71 - 127*		*05/12/16 18:46*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*05/12/16 18:46*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.81		0.81	0.25	ug/L		05/05/16 08:14	05/13/16 01:18	1
Acenaphthylene	<0.81		0.81	0.22	ug/L		05/05/16 08:14	05/13/16 01:18	1
Acetophenone	<4.1		4.1	0.54	ug/L		05/05/16 08:14	05/13/16 01:18	1
Anthracene	<0.81		0.81	0.27	ug/L		05/05/16 08:14	05/13/16 01:18	1
Benzo[a]anthracene	<0.16		0.16	0.046	ug/L		05/05/16 08:14	05/13/16 01:18	1
Benzo[a]pyrene	<0.16		0.16	0.080	ug/L		05/05/16 08:14	05/13/16 01:18	1
Benzo[b]fluoranthene	<0.16		0.16	0.065	ug/L		05/05/16 08:14	05/13/16 01:18	1
Benzo[g,h,i]perylene	<0.81		0.81	0.30	ug/L		05/05/16 08:14	05/13/16 01:18	1
Benzo[k]fluoranthene	<0.16		0.16	0.052	ug/L		05/05/16 08:14	05/13/16 01:18	1
Bis(2-chloroethoxy)methane	<1.6		1.6	0.23	ug/L		05/05/16 08:14	05/13/16 01:18	1
Bis(2-chloroethyl)ether	<1.6		1.6	0.24	ug/L		05/05/16 08:14	05/13/16 01:18	1
Bis(2-ethylhexyl) phthalate	<8.1		8.1	1.4	ug/L		05/05/16 08:14	05/13/16 01:18	1
4-Bromophenyl phenyl ether	<4.1		4.1	0.44	ug/L		05/05/16 08:14	05/13/16 01:18	1
Butyl benzyl phthalate	<1.6		1.6	0.39	ug/L		05/05/16 08:14	05/13/16 01:18	1
Carbazole	<4.1		4.1	0.29	ug/L		05/05/16 08:14	05/13/16 01:18	1
4-Chloroaniline	<8.1	UJ	8.1	1.6	ug/L		05/05/16 08:14	05/13/16 01:18	1
4-Chloro-3-methylphenol	<8.1		8.1	1.9	ug/L		05/05/16 08:14	05/13/16 01:18	1
2-Chloronaphthalene	<1.6		1.6	0.19	ug/L		05/05/16 08:14	05/13/16 01:18	1
2-Chlorophenol	<4.1		4.1	0.45	ug/L		05/05/16 08:14	05/13/16 01:18	1
4-Chlorophenyl phenyl ether	<4.1		4.1	0.52	ug/L		05/05/16 08:14	05/13/16 01:18	1
Chrysene	<0.41		0.41	0.055	ug/L		05/05/16 08:14	05/13/16 01:18	1
Dibenz(a,h)anthracene	<0.24		0.24	0.041	ug/L		05/05/16 08:14	05/13/16 01:18	1
Dibenzofuran	<1.6		1.6	0.21	ug/L		05/05/16 08:14	05/13/16 01:18	1
3,3'-Dichlorobenzidine	<4.1		4.1	1.4	ug/L		05/05/16 08:14	05/13/16 01:18	1
2,4-Dichlorophenol	<8.1		8.1	2.1	ug/L		05/05/16 08:14	05/13/16 01:18	1
Diethyl phthalate	**3.0**		1.6	0.29	ug/L		05/05/16 08:14	05/13/16 01:18	1
2,4-Dimethylphenol	<8.1	UJ	8.1	1.5	ug/L		05/05/16 08:14	05/13/16 01:18	1
Dimethyl phthalate	<1.6		1.6	0.25	ug/L		05/05/16 08:14	05/13/16 01:18	1
Di-n-butyl phthalate	<4.1		4.1	0.59	ug/L		05/05/16 08:14	05/13/16 01:18	1
4,6-Dinitro-2-methylphenol	<16		16	4.8	ug/L		05/05/16 08:14	05/13/16 01:18	1
2,4-Dinitrophenol	<16		16	7.0	ug/L		05/05/16 08:14	05/13/16 01:18	1
2,4-Dinitrotoluene	<0.81		0.81	0.20	ug/L		05/05/16 08:14	05/13/16 01:18	1
2,6-Dinitrotoluene	<0.41		0.41	0.060	ug/L		05/05/16 08:14	05/13/16 01:18	1
Di-n-octyl phthalate	<8.1		8.1	0.85	ug/L		05/05/16 08:14	05/13/16 01:18	1
Fluoranthene	<0.81		0.81	0.37	ug/L		05/05/16 08:14	05/13/16 01:18	1
Fluorene	<0.81		0.81	0.20	ug/L		05/05/16 08:14	05/13/16 01:18	1
Hexachlorobenzene	<0.41		0.41	0.064	ug/L		05/05/16 08:14	05/13/16 01:18	1
Hexachlorobutadiene	<4.1		4.1	0.42	ug/L		05/05/16 08:14	05/13/16 01:18	1
Hexachlorocyclopentadiene	<16		16	5.2	ug/L		05/05/16 08:14	05/13/16 01:18	1
Hexachloroethane	<4.1		4.1	0.49	ug/L		05/05/16 08:14	05/13/16 01:18	1
Indeno[1,2,3-cd]pyrene	<0.16		0.16	0.061	ug/L		05/05/16 08:14	05/13/16 01:18	1
Isophorone	<1.6		1.6	0.30	ug/L		05/05/16 08:14	05/13/16 01:18	1
2-Methylnaphthalene	**0.19**	J	0.41	0.053	ug/L		05/05/16 08:14	05/13/16 01:18	1

Client Sample ID: MW-10-GW-04292016

Date Collected: 04/29/16 07:07
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-2

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	<1.6		1.6	0.25	ug/L		05/05/16 08:14	05/13/16 01:18	1
3 & 4 Methylphenol	<1.6		1.6	0.36	ug/L		05/05/16 08:14	05/13/16 01:18	1
Naphthalene	<0.81		0.81	0.25	ug/L		05/05/16 08:14	05/13/16 01:18	1
2-Nitroaniline	<4.1		4.1	1.0	ug/L		05/05/16 08:14	05/13/16 01:18	1
3-Nitroaniline	<8.1		8.1	1.4	ug/L		05/05/16 08:14	05/13/16 01:18	1
4-Nitroaniline	<8.1		8.1	1.3	ug/L		05/05/16 08:14	05/13/16 01:18	1
Nitrobenzene	<0.81		0.81	0.36	ug/L		05/05/16 08:14	05/13/16 01:18	1
2-Nitrophenol	<8.1		8.1	2.0	ug/L		05/05/16 08:14	05/13/16 01:18	1
4-Nitrophenol	<16		16	6.0	ug/L		05/05/16 08:14	05/13/16 01:18	1
N-Nitrosodi-n-propylamine	<0.41		0.41	0.12	ug/L		05/05/16 08:14	05/13/16 01:18	1
N-Nitrosodiphenylamine	**0.72**	**J**	0.81	0.30	ug/L		05/05/16 08:14	05/13/16 01:18	1
2,2'-oxybis[1-chloropropane]	<1.6		1.6	0.31	ug/L		05/05/16 08:14	05/13/16 01:18	1
Pentachlorophenol	<16		16	3.2	ug/L		05/05/16 08:14	05/13/16 01:18	1
Phenanthrene	<0.81		0.81	0.24	ug/L		05/05/16 08:14	05/13/16 01:18	1
Phenol	<4.1		4.1	0.54	ug/L		05/05/16 08:14	05/13/16 01:18	1
Pyrene	<0.81		0.81	0.35	ug/L		05/05/16 08:14	05/13/16 01:18	1
2,4,5-Trichlorophenol	<8.1		8.1	2.1	ug/L		05/05/16 08:14	05/13/16 01:18	1
2,4,6-Trichlorophenol	<4.1		4.1	0.58	ug/L		05/05/16 08:14	05/13/16 01:18	1
Benzaldehyde	~~<16~~	~~^ *~~ R	~~16~~	~~12~~	~~ug/L~~		05/05/16 08:14	05/13/16 01:18	1
Caprolactam	**2.9**	**J**	8.1	1.2	ug/L		05/05/16 08:14	05/13/16 01:18	1
Atrazine	<4.1		4.1	0.51	ug/L		05/05/16 08:14	05/13/16 01:18	1
1,1'-Biphenyl	<4.1		4.1	0.29	ug/L		05/05/16 08:14	05/13/16 01:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*30 - 123*	*05/05/16 08:14*	*05/13/16 01:18*	*1*
2-Fluorophenol (Surr)	*70*		*30 - 110*	*05/05/16 08:14*	*05/13/16 01:18*	*1*
Nitrobenzene-d5 (Surr)	*82*		*33 - 139*	*05/05/16 08:14*	*05/13/16 01:18*	*1*
Phenol-d5 (Surr)	*54*		*20 - 100*	*05/05/16 08:14*	*05/13/16 01:18*	*1*
Terphenyl-d14 (Surr)	*100*		*42 - 150*	*05/05/16 08:14*	*05/13/16 01:18*	*1*
2,4,6-Tribromophenol (Surr)	*88*		*30 - 150*	*05/05/16 08:14*	*05/13/16 01:18*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.041		0.041	0.0055	ug/L		05/02/16 16:20	05/03/16 15:54	1
alpha-BHC	<0.041		0.041	0.0027	ug/L		05/02/16 16:20	05/03/16 15:54	1
alpha-Chlordane	<0.041		0.041	0.0046	ug/L		05/02/16 16:20	05/03/16 15:54	1
beta-BHC	<0.041		0.041	0.011	ug/L		05/02/16 16:20	05/03/16 15:54	1
4,4'-DDD	<0.041		0.041	0.014	ug/L		05/02/16 16:20	05/03/16 15:54	1
4,4'-DDE	<0.041		0.041	0.0039	ug/L		05/02/16 16:20	05/03/16 15:54	1
4,4'-DDT	<0.041		0.041	0.0033	ug/L		05/02/16 16:20	05/03/16 15:54	1
delta-BHC	<0.041		0.041	0.011	ug/L		05/02/16 16:20	05/03/16 15:54	1
Dieldrin	<0.041		0.041	0.013	ug/L		05/02/16 16:20	05/03/16 15:54	1
Endosulfan I	<0.041		0.041	0.0042	ug/L		05/02/16 16:20	05/03/16 15:54	1
Endosulfan II	<0.041		0.041	0.0029	ug/L		05/02/16 16:20	05/03/16 15:54	1
Endosulfan sulfate	<0.041		0.041	0.012	ug/L		05/02/16 16:20	05/03/16 15:54	1
Endrin	<0.041		0.041	0.015	ug/L		05/02/16 16:20	05/03/16 15:54	1
Endrin aldehyde	<0.041		0.041	0.0085	ug/L		05/02/16 16:20	05/03/16 15:54	1
Endrin ketone	<0.041		0.041	0.018	ug/L		05/02/16 16:20	05/03/16 15:54	1
gamma-BHC (Lindane)	<0.041		0.041	0.0058	ug/L		05/02/16 16:20	05/03/16 15:54	1
gamma-Chlordane	<0.041		0.041	0.0075	ug/L		05/02/16 16:20	05/03/16 15:54	1

Client Sample ID: MW-10-GW-04292016

Date Collected: 04/29/16 07:07
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-2

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	<0.041		0.041	0.014	ug/L		05/02/16 16:20	05/03/16 15:54	1
Heptachlor epoxide	<0.041		0.041	0.014	ug/L		05/02/16 16:20	05/03/16 15:54	1
Methoxychlor	<0.083		0.083	0.024	ug/L		05/02/16 16:20	05/03/16 15:54	1
Toxaphene	<0.41		0.41	0.21	ug/L		05/02/16 16:20	05/03/16 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*30 - 143*	*05/02/16 16:20*	*05/03/16 15:54*	*1*
Tetrachloro-m-xylene	*65*		*30 - 120*	*05/02/16 16:20*	*05/03/16 15:54*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.41		0.41	0.069	ug/L		05/02/16 16:20	05/03/16 17:21	1
PCB-1221	<0.41		0.41	0.21	ug/L		05/02/16 16:20	05/03/16 17:21	1
PCB-1232	<0.41		0.41	0.21	ug/L		05/02/16 16:20	05/03/16 17:21	1
PCB-1242	<0.41		0.41	0.21	ug/L		05/02/16 16:20	05/03/16 17:21	1
PCB-1248	<0.41		0.41	0.21	ug/L		05/02/16 16:20	05/03/16 17:21	1
PCB-1254	<0.41		0.41	0.21	ug/L		05/02/16 16:20	05/03/16 17:21	1
PCB-1260	<0.41		0.41	0.073	ug/L		05/02/16 16:20	05/03/16 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*30 - 127*	*05/02/16 16:20*	*05/03/16 17:21*	*1*
DCB Decachlorobiphenyl	*67*		*30 - 150*	*05/02/16 16:20*	*05/03/16 17:21*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		05/02/16 09:28	05/03/16 19:02	1
Antimony	<0.020		0.020	0.0064	mg/L		05/02/16 09:28	05/03/16 19:02	1
Arsenic	<0.010		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:02	1
Barium	**0.12**		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:02	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		05/02/16 09:28	05/03/16 19:02	1
Cadmium	**0.0014**	**J**	0.0020	0.00094	mg/L		05/02/16 09:28	05/03/16 19:02	1
Calcium	**210**	J	0.20	0.059	mg/L		05/02/16 09:28	05/03/16 19:02	1
Chromium	<0.010		0.010	0.0024	mg/L		05/02/16 09:28	05/03/16 19:02	1
Cobalt	<0.0050		0.0050	0.00096	mg/L		05/02/16 09:28	05/03/16 19:02	1
Copper	**0.0023**	**J**	0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:02	1
Iron	**20**	J	0.20	0.10	mg/L		05/02/16 09:28	05/03/16 19:02	1
Lead	**0.0043**	**J**	0.0050	0.0024	mg/L		05/02/16 09:28	05/03/16 19:02	1
Magnesium	**94**		0.10	0.034	mg/L		05/02/16 09:28	05/03/16 19:02	1
Manganese	**1.1**		0.010	0.0034	mg/L		05/02/16 09:28	05/03/16 19:02	1
Nickel	**0.0077**	**J**	0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:02	1
Potassium	**94**		0.50	0.16	mg/L		05/02/16 09:28	05/03/16 19:02	1
Selenium	< 0.010	~~0.0060 J B~~ UB	0.010	0.0046	mg/L		05/02/16 09:28	05/03/16 19:02	1
Silver	<0.0050		0.0050	0.0013	mg/L		05/02/16 09:28	05/03/16 19:02	1
Sodium	**320**		1.0	0.43	mg/L		05/02/16 09:28	05/03/16 19:02	1
Thallium	<0.010		0.010	0.0028	mg/L		05/02/16 09:28	05/03/16 19:02	1
Vanadium	<0.0050		0.0050	0.0019	mg/L		05/02/16 09:28	05/03/16 19:02	1
Zinc	**0.026**		0.020	0.0090	mg/L		05/02/16 09:28	05/03/16 19:02	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		05/02/16 09:28	05/03/16 19:07	1

Client Sample ID: MW-10-GW-04292016

Date Collected: 04/29/16 07:07
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-2

Matrix: Water

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.020		0.020	0.0064	mg/L		05/02/16 09:28	05/03/16 19:07	1
Arsenic	<0.010		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:07	1
Barium	**0.12**		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:07	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		05/02/16 09:28	05/03/16 19:07	1
Cadmium	**0.0011**	J	0.0020	0.00094	mg/L		05/02/16 09:28	05/03/16 19:07	1
Calcium	**210**	J	0.20	0.059	mg/L		05/02/16 09:28	05/03/16 19:07	1
Chromium	<0.010		0.010	0.0024	mg/L		05/02/16 09:28	05/03/16 19:07	1
Cobalt	<0.0050		0.0050	0.00096	mg/L		05/02/16 09:28	05/03/16 19:07	1
Copper	<0.010		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:07	1
Iron	**19**	J	0.20	0.10	mg/L		05/02/16 09:28	05/03/16 19:07	1
Lead	<0.0050	UJ	0.0050	0.0024	mg/L		05/02/16 09:28	05/03/16 19:07	1
Magnesium	**95**		0.10	0.034	mg/L		05/02/16 09:28	05/03/16 19:07	1
Manganese	**1.1**		0.010	0.0034	mg/L		05/02/16 09:28	05/03/16 19:07	1
Nickel	**0.0062**	J	0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:07	1
Potassium	**92**		0.50	0.16	mg/L		05/02/16 09:28	05/03/16 19:07	1
Selenium	<0.010		0.010	0.0046	mg/L		05/02/16 09:28	05/03/16 19:07	1
Silver	<0.0050		0.0050	0.0013	mg/L		05/02/16 09:28	05/03/16 19:07	1
Sodium	**310**		1.0	0.43	mg/L		05/02/16 09:28	05/03/16 19:07	1
Thallium	<0.010		0.010	0.0028	mg/L		05/02/16 09:28	05/03/16 19:07	1
Vanadium	<0.0050		0.0050	0.0019	mg/L		05/02/16 09:28	05/03/16 19:07	1
Zinc	**0.0092**	J	0.020	0.0090	mg/L		05/02/16 09:28	05/03/16 19:07	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/04/16 15:00	05/05/16 11:27	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/04/16 15:00	05/05/16 11:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<1.0		1.0	0.22	mg/L			05/03/16 05:41	1
Sulfate	**420**		100	40	mg/L			05/06/16 09:20	20
Total Organic Carbon - Duplicates	**11**		1.0	0.23	mg/L			05/13/16 22:38	1
Nitrogen, Nitrate	<0.10		0.10	0.045	mg/L			05/13/16 15:09	1
Total Suspended Solids	**49**		5.0	1.6	mg/L			05/03/16 11:45	1
Ammonia	**4.0**	~~B~~	0.20	0.043	mg/L		05/11/16 18:12	05/12/16 19:20	1
Nitrogen, Nitrite	**0.0032**	J	0.020	0.0032	mg/L			04/30/16 12:20	1
Nitrogen, Nitrate Nitrite	<0.10		0.10	0.045	mg/L			05/12/16 09:34	1

Client Sample ID: MW-6-GW-04292016

Date Collected: 04/29/16 08:47
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**33**		5.0	1.7	ug/L			05/12/16 19:12	1
Benzene	**7.0**		0.50	0.15	ug/L			05/12/16 19:12	1
Bromodichloromethane	<1.0		1.0	0.37	ug/L			05/12/16 19:12	1
Bromoform	<1.0	UJ	1.0	0.48	ug/L			05/12/16 19:12	1
Bromomethane	<2.0		2.0	0.80	ug/L			05/12/16 19:12	1
Carbon disulfide	<2.0		2.0	0.45	ug/L			05/12/16 19:12	1
Carbon tetrachloride	<1.0		1.0	0.38	ug/L			05/12/16 19:12	1
Chlorobenzene	<1.0		1.0	0.39	ug/L			05/12/16 19:12	1
Chloroethane	<1.0		1.0	0.51	ug/L			05/12/16 19:12	1
Chloroform	<1.0		1.0	0.37	ug/L			05/12/16 19:12	1
Chloromethane	<1.0		1.0	0.32	ug/L			05/12/16 19:12	1
cis-1,2-Dichloroethene	**4.7**		1.0	0.41	ug/L			05/12/16 19:12	1
cis-1,3-Dichloropropene	<1.0		1.0	0.42	ug/L			05/12/16 19:12	1
Cyclohexane	<1.0		1.0	0.49	ug/L			05/12/16 19:12	1
Dibromochloromethane	<1.0		1.0	0.49	ug/L			05/12/16 19:12	1
1,2-Dibromo-3-Chloropropane	<5.0	UJ	5.0	2.0	ug/L			05/12/16 19:12	1
1,2-Dibromoethane	<1.0		1.0	0.39	ug/L			05/12/16 19:12	1
1,2-Dichlorobenzene	**2.4**		1.0	0.33	ug/L			05/12/16 19:12	1
1,3-Dichlorobenzene	<1.0		1.0	0.40	ug/L			05/12/16 19:12	1
1,4-Dichlorobenzene	**13**		1.0	0.36	ug/L			05/12/16 19:12	1
Dichlorodifluoromethane	<2.0		2.0	0.67	ug/L			05/12/16 19:12	1
1,1-Dichloroethane	**0.51**	J	1.0	0.41	ug/L			05/12/16 19:12	1
1,2-Dichloroethane	**1.4**		1.0	0.39	ug/L			05/12/16 19:12	1
1,1-Dichloroethene	<1.0		1.0	0.39	ug/L			05/12/16 19:12	1
1,2-Dichloropropane	<1.0		1.0	0.43	ug/L			05/12/16 19:12	1
Ethylbenzene	**100**		0.50	0.18	ug/L			05/12/16 19:12	1
2-Hexanone	<5.0	UJ	5.0	1.6	ug/L			05/12/16 19:12	1
Isopropylbenzene	**6.7**		1.0	0.39	ug/L			05/12/16 19:12	1
Methyl acetate	<5.0		5.0	2.0	ug/L			05/12/16 19:12	1
Methylcyclohexane	**1.1**		1.0	0.32	ug/L			05/12/16 19:12	1
Methylene Chloride	<5.0		5.0	1.6	ug/L			05/12/16 19:12	1
Methyl Ethyl Ketone	**14**	J	5.0	2.1	ug/L			05/12/16 19:12	1
methyl isobutyl ketone	**27**	J	5.0	2.2	ug/L			05/12/16 19:12	1
Methyl tert-butyl ether	<1.0		1.0	0.39	ug/L			05/12/16 19:12	1
Styrene	<1.0		1.0	0.39	ug/L			05/12/16 19:12	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.40	ug/L			05/12/16 19:12	1
Tetrachloroethene	<1.0		1.0	0.37	ug/L			05/12/16 19:12	1
Toluene	**160**		0.50	0.15	ug/L			05/12/16 19:12	1
trans-1,2-Dichloroethene	<1.0		1.0	0.35	ug/L			05/12/16 19:12	1
trans-1,3-Dichloropropene	<1.0		1.0	0.36	ug/L			05/12/16 19:12	1
1,2,4-Trichlorobenzene	<1.0		1.0	0.34	ug/L			05/12/16 19:12	1
1,1,1-Trichloroethane	<1.0		1.0	0.38	ug/L			05/12/16 19:12	1
1,1,2-Trichloroethane	<1.0		1.0	0.35	ug/L			05/12/16 19:12	1
Trichloroethene	<0.50		0.50	0.16	ug/L			05/12/16 19:12	1
Trichlorofluoromethane	<1.0		1.0	0.43	ug/L			05/12/16 19:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0	0.46	ug/L			05/12/16 19:12	1
Vinyl chloride	**4.1**		0.50	0.20	ug/L			05/12/16 19:12	1

Client Sample ID: MW-6-GW-04292016

Date Collected: 04/29/16 08:47
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*71 - 120*		*05/12/16 19:12*	*1*
Dibromofluoromethane	*96*		*70 - 120*		*05/12/16 19:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*71 - 127*		*05/12/16 19:12*	*1*
Toluene-d8 (Surr)	*105*		*75 - 120*		*05/12/16 19:12*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	**380**	D	5.0	1.1	ug/L			05/12/16 19:39	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*71 - 120*		*05/12/16 19:39*	*5*
Dibromofluoromethane	*97*		*70 - 120*		*05/12/16 19:39*	*5*
1,2-Dichloroethane-d4 (Surr)	*94*		*71 - 127*		*05/12/16 19:39*	*5*
Toluene-d8 (Surr)	*101*		*75 - 120*		*05/12/16 19:39*	*5*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<8.6		8.6	2.7	ug/L		05/05/16 08:14	05/13/16 09:27	10
Acenaphthylene	<8.6		8.6	2.3	ug/L		05/05/16 08:14	05/13/16 09:27	10
Acetophenone	<43		43	5.7	ug/L		05/05/16 08:14	05/13/16 09:27	10
Anthracene	<8.6		8.6	2.9	ug/L		05/05/16 08:14	05/13/16 09:27	10
Benzo[a]anthracene	<1.7		1.7	0.49	ug/L		05/05/16 08:14	05/13/16 09:27	10
Benzo[a]pyrene	<1.7		1.7	0.85	ug/L		05/05/16 08:14	05/13/16 09:27	10
Benzo[b]fluoranthene	<1.7		1.7	0.70	ug/L		05/05/16 08:14	05/13/16 09:27	10
Benzo[g,h,i]perylene	<8.6		8.6	3.2	ug/L		05/05/16 08:14	05/13/16 09:27	10
Benzo[k]fluoranthene	<1.7		1.7	0.55	ug/L		05/05/16 08:14	05/13/16 09:27	10
Bis(2-chloroethoxy)methane	<17		17	2.4	ug/L		05/05/16 08:14	05/13/16 09:27	10
Bis(2-chloroethyl)ether	<17		17	2.5	ug/L		05/05/16 08:14	05/13/16 09:27	10
Bis(2-ethylhexyl) phthalate	**85**	J D	86	15	ug/L		05/05/16 08:14	05/13/16 09:27	10
4-Bromophenyl phenyl ether	<43		43	4.7	ug/L		05/05/16 08:14	05/13/16 09:27	10
Butyl benzyl phthalate	<17		17	4.1	ug/L		05/05/16 08:14	05/13/16 09:27	10
Carbazole	<43		43	3.1	ug/L		05/05/16 08:14	05/13/16 09:27	10
4-Chloroaniline	<86	UJ	86	17	ug/L		05/05/16 08:14	05/13/16 09:27	10
4-Chloro-3-methylphenol	<86		86	20	ug/L		05/05/16 08:14	05/13/16 09:27	10
2-Chloronaphthalene	<17		17	2.0	ug/L		05/05/16 08:14	05/13/16 09:27	10
2-Chlorophenol	<43		43	4.8	ug/L		05/05/16 08:14	05/13/16 09:27	10
4-Chlorophenyl phenyl ether	<43		43	5.5	ug/L		05/05/16 08:14	05/13/16 09:27	10
Chrysene	<4.3		4.3	0.59	ug/L		05/05/16 08:14	05/13/16 09:27	10
Dibenz(a,h)anthracene	<2.6		2.6	0.44	ug/L		05/05/16 08:14	05/13/16 09:27	10
Dibenzofuran	<17		17	2.3	ug/L		05/05/16 08:14	05/13/16 09:27	10
3,3'-Dichlorobenzidine	<43		43	15	ug/L		05/05/16 08:14	05/13/16 09:27	10
2,4-Dichlorophenol	<86		86	22	ug/L		05/05/16 08:14	05/13/16 09:27	10
Diethyl phthalate	<17		17	3.1	ug/L		05/05/16 08:14	05/13/16 09:27	10
2,4-Dimethylphenol	**110**	JD	86	16	ug/L		05/05/16 08:14	05/13/16 09:27	10
Dimethyl phthalate	<17		17	2.7	ug/L		05/05/16 08:14	05/13/16 09:27	10
Di-n-butyl phthalate	<43		43	6.3	ug/L		05/05/16 08:14	05/13/16 09:27	10
4,6-Dinitro-2-methylphenol	<170		170	51	ug/L		05/05/16 08:14	05/13/16 09:27	10
2,4-Dinitrophenol	<170		170	74	ug/L		05/05/16 08:14	05/13/16 09:27	10
2,4-Dinitrotoluene	<8.6		8.6	2.1	ug/L		05/05/16 08:14	05/13/16 09:27	10
2,6-Dinitrotoluene	<4.3		4.3	0.64	ug/L		05/05/16 08:14	05/13/16 09:27	10
Di-n-octyl phthalate	<86		86	9.1	ug/L		05/05/16 08:14	05/13/16 09:27	10

Client Sample ID: MW-6-GW-04292016

Date Collected: 04/29/16 08:47
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-3

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<8.6		8.6	3.9	ug/L		05/05/16 08:14	05/13/16 09:27	10
Fluorene	<8.6		8.6	2.1	ug/L		05/05/16 08:14	05/13/16 09:27	10
Hexachlorobenzene	<4.3		4.3	0.68	ug/L		05/05/16 08:14	05/13/16 09:27	10
Hexachlorobutadiene	<43		43	4.4	ug/L		05/05/16 08:14	05/13/16 09:27	10
Hexachlorocyclopentadiene	<170		170	55	ug/L		05/05/16 08:14	05/13/16 09:27	10
Hexachloroethane	<43		43	5.2	ug/L		05/05/16 08:14	05/13/16 09:27	10
Indeno[1,2,3-cd]pyrene	<1.7		1.7	0.64	ug/L		05/05/16 08:14	05/13/16 09:27	10
Isophorone	<17		17	3.2	ug/L		05/05/16 08:14	05/13/16 09:27	10
2-Methylnaphthalene	<4.3		4.3	0.56	ug/L		05/05/16 08:14	05/13/16 09:27	10
2-Methylphenol	**20**	D	17	2.6	ug/L		05/05/16 08:14	05/13/16 09:27	10
3 & 4 Methylphenol	**96**	D	17	3.9	ug/L		05/05/16 08:14	05/13/16 09:27	10
Naphthalene	**16**	D	8.6	2.7	ug/L		05/05/16 08:14	05/13/16 09:27	10
2-Nitroaniline	<43		43	11	ug/L		05/05/16 08:14	05/13/16 09:27	10
3-Nitroaniline	<86		86	15	ug/L		05/05/16 08:14	05/13/16 09:27	10
4-Nitroaniline	<86		86	14	ug/L		05/05/16 08:14	05/13/16 09:27	10
Nitrobenzene	<8.6		8.6	3.9	ug/L		05/05/16 08:14	05/13/16 09:27	10
2-Nitrophenol	<86		86	22	ug/L		05/05/16 08:14	05/13/16 09:27	10
4-Nitrophenol	<170		170	64	ug/L		05/05/16 08:14	05/13/16 09:27	10
N-Nitrosodi-n-propylamine	<4.3		4.3	1.3	ug/L		05/05/16 08:14	05/13/16 09:27	10
N-Nitrosodiphenylamine	<8.6		8.6	3.2	ug/L		05/05/16 08:14	05/13/16 09:27	10
2,2'-oxybis[1-chloropropane]	<17		17	3.3	ug/L		05/05/16 08:14	05/13/16 09:27	10
Pentachlorophenol	<170		170	34	ug/L		05/05/16 08:14	05/13/16 09:27	10
Phenanthrene	<8.6		8.6	2.6	ug/L		05/05/16 08:14	05/13/16 09:27	10
Phenol	**40**	J D	43	5.8	ug/L		05/05/16 08:14	05/13/16 09:27	10
Pyrene	<8.6		8.6	3.7	ug/L		05/05/16 08:14	05/13/16 09:27	10
2,4,5-Trichlorophenol	<86		86	22	ug/L		05/05/16 08:14	05/13/16 09:27	10
2,4,6-Trichlorophenol	<43		43	6.2	ug/L		05/05/16 08:14	05/13/16 09:27	10
Benzaldehyde	~~<170~~ *	R	~~170~~	~~130~~	~~ug/L~~		05/05/16 08:14	05/13/16 09:27	10
Caprolactam	<86		86	13	ug/L		05/05/16 08:14	05/13/16 09:27	10
Atrazine	<43		43	5.4	ug/L		05/05/16 08:14	05/13/16 09:27	10
1,1'-Biphenyl	<43		43	3.1	ug/L		05/05/16 08:14	05/13/16 09:27	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*91*		*30 - 123*	*05/05/16 08:14*	*05/13/16 09:27*	*10*
2-Fluorophenol (Surr)	*69*		*30 - 110*	*05/05/16 08:14*	*05/13/16 09:27*	*10*
Nitrobenzene-d5 (Surr)	*89*		*33 - 139*	*05/05/16 08:14*	*05/13/16 09:27*	*10*
Phenol-d5 (Surr)	*60*		*20 - 100*	*05/05/16 08:14*	*05/13/16 09:27*	*10*
Terphenyl-d14 (Surr)	*106*		*42 - 150*	*05/05/16 08:14*	*05/13/16 09:27*	*10*
2,4,6-Tribromophenol (Surr)	*105*		*30 - 150*	*05/05/16 08:14*	*05/13/16 09:27*	*10*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.043		0.043	0.0058	ug/L		05/02/16 16:20	05/03/16 16:13	1
alpha-BHC	<0.043		0.043	0.0028	ug/L		05/02/16 16:20	05/03/16 16:13	1
alpha-Chlordane	<0.043		0.043	0.0048	ug/L		05/02/16 16:20	05/03/16 16:13	1
beta-BHC	<0.043		0.043	0.011	ug/L		05/02/16 16:20	05/03/16 16:13	1
4,4'-DDD	<0.043		0.043	0.014	ug/L		05/02/16 16:20	05/03/16 16:13	1
4,4'-DDE	<0.043		0.043	0.0041	ug/L		05/02/16 16:20	05/03/16 16:13	1
4,4'-DDT	<0.043		0.043	0.0035	ug/L		05/02/16 16:20	05/03/16 16:13	1
delta-BHC	<0.043		0.043	0.011	ug/L		05/02/16 16:20	05/03/16 16:13	1

Client Sample ID: MW-6-GW-04292016

Date Collected: 04/29/16 08:47
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Lab Sample ID: 500-110948-3

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	<0.043		0.043	0.014	ug/L		05/02/16 16:20	05/03/16 16:13	1
Endosulfan I	<0.043		0.043	0.0045	ug/L		05/02/16 16:20	05/03/16 16:13	1
Endosulfan II	<0.043		0.043	0.0030	ug/L		05/02/16 16:20	05/03/16 16:13	1
Endosulfan sulfate	<0.043		0.043	0.013	ug/L		05/02/16 16:20	05/03/16 16:13	1
Endrin	<0.043		0.043	0.015	ug/L		05/02/16 16:20	05/03/16 16:13	1
Endrin aldehyde	<0.043		0.043	0.0089	ug/L		05/02/16 16:20	05/03/16 16:13	1
Endrin ketone	<0.043		0.043	0.018	ug/L		05/02/16 16:20	05/03/16 16:13	1
gamma-BHC (Lindane)	<0.043		0.043	0.0061	ug/L		05/02/16 16:20	05/03/16 16:13	1
gamma-Chlordane	<0.043		0.043	0.0078	ug/L		05/02/16 16:20	05/03/16 16:13	1
Heptachlor	<0.043		0.043	0.015	ug/L		05/02/16 16:20	05/03/16 16:13	1
Heptachlor epoxide	<0.043		0.043	0.015	ug/L		05/02/16 16:20	05/03/16 16:13	1
Methoxychlor	<0.087		0.087	0.025	ug/L		05/02/16 16:20	05/03/16 16:13	1
Toxaphene	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 16:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*40*		*30 - 143*	*05/02/16 16:20*	*05/03/16 16:13*	*1*
Tetrachloro-m-xylene	*110*		*30 - 120*	*05/02/16 16:20*	*05/03/16 16:13*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.43		0.43	0.073	ug/L		05/02/16 16:20	05/03/16 17:36	1
PCB-1016	<0.43		0.43	0.073	ug/L		05/02/16 16:20	05/03/16 17:36	1
PCB-1221	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 17:36	1
PCB-1221	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 17:36	1
PCB-1232	~~6.5~~		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 17:36	1
PCB-1232	**4.9**		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 17:36	1
PCB-1242	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 17:36	1
PCB-1242	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 17:36	1
PCB-1248	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 17:36	1
PCB-1248	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 17:36	1
PCB-1254	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 17:36	1
PCB-1254	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 17:36	1
PCB-1260	<0.43		0.43	0.076	ug/L		05/02/16 16:20	05/03/16 17:36	1
PCB-1260	<0.43		0.43	0.076	ug/L		05/02/16 16:20	05/03/16 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*57*		*30 - 127*	*05/02/16 16:20*	*05/03/16 17:36*	*1*
Tetrachloro-m-xylene	*30*		*30 - 127*	*05/02/16 16:20*	*05/03/16 17:36*	*1*
DCB Decachlorobiphenyl	*22*	*X*	*30 - 150*	*05/02/16 16:20*	*05/03/16 17:36*	*1*
DCB Decachlorobiphenyl	*28*	*X*	*30 - 150*	*05/02/16 16:20*	*05/03/16 17:36*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.47**		0.20	0.062	mg/L		05/02/16 09:28	05/03/16 19:12	1
Antimony	<0.020		0.020	0.0064	mg/L		05/02/16 09:28	05/03/16 19:12	1
Arsenic	**0.024**		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:12	1
Barium	**0.29**		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:12	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		05/02/16 09:28	05/03/16 19:12	1
Cadmium	**0.0022**		0.0020	0.00094	mg/L		05/02/16 09:28	05/03/16 19:12	1
Calcium	**30**	J	0.20	0.059	mg/L		05/02/16 09:28	05/03/16 19:12	1

Client Sample ID: MW-6-GW-04292016

Date Collected: 04/29/16 08:47
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-3

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.13		0.010	0.0024	mg/L		05/02/16 09:28	05/03/16 19:12	1
Cobalt	0.032		0.0050	0.00096	mg/L		05/02/16 09:28	05/03/16 19:12	1
Copper	0.012		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:12	1
Iron	2.0	J	0.20	0.10	mg/L		05/02/16 09:28	05/03/16 19:12	1
Lead	0.11		0.0050	0.0024	mg/L		05/02/16 09:28	05/03/16 19:12	1
Magnesium	28		0.10	0.034	mg/L		05/02/16 09:28	05/03/16 19:12	1
Manganese	0.0099	J	0.010	0.0034	mg/L		05/02/16 09:28	05/03/16 19:12	1
Nickel	0.13		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:12	1
Potassium	570		0.50	0.16	mg/L		05/02/16 09:28	05/03/16 19:12	1
Selenium	< 0.010 ~~0.0081~~	~~J B~~ UB	0.010	0.0046	mg/L		05/02/16 09:28	05/03/16 19:12	1
Silver	<0.0050		0.0050	0.0013	mg/L		05/02/16 09:28	05/03/16 19:12	1
Sodium	3100		100	43	mg/L		05/02/16 09:28	05/05/16 15:42	100
Thallium	<0.010		0.010	0.0028	mg/L		05/02/16 09:28	05/03/16 19:12	1
Vanadium	0.057		0.0050	0.0019	mg/L		05/02/16 09:28	05/03/16 19:12	1
Zinc	0.17		0.020	0.0090	mg/L		05/02/16 09:28	05/03/16 19:12	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.38		0.20	0.062	mg/L		05/02/16 09:28	05/03/16 19:18	1
Antimony	<0.020		0.020	0.0064	mg/L		05/02/16 09:28	05/03/16 19:18	1
Arsenic	0.024		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:18	1
Barium	0.31		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:18	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		05/02/16 09:28	05/03/16 19:18	1
Cadmium	0.0016	J	0.0020	0.00094	mg/L		05/02/16 09:28	05/03/16 19:18	1
Calcium	27	J	0.20	0.059	mg/L		05/02/16 09:28	05/03/16 19:18	1
Chromium	0.14		0.010	0.0024	mg/L		05/02/16 09:28	05/03/16 19:18	1
Cobalt	0.036		0.0050	0.00096	mg/L		05/02/16 09:28	05/03/16 19:18	1
Copper	0.0090	J	0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:18	1
Iron	2.1		0.20	0.10	mg/L		05/02/16 09:28	05/03/16 19:18	1
Lead	0.076	J	0.0050	0.0024	mg/L		05/02/16 09:28	05/03/16 19:18	1
Magnesium	29		0.10	0.034	mg/L		05/02/16 09:28	05/03/16 19:18	1
Manganese	0.0087	J	0.010	0.0034	mg/L		05/02/16 09:28	05/03/16 19:18	1
Nickel	0.14		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:18	1
Potassium	610		0.50	0.16	mg/L		05/02/16 09:28	05/03/16 19:18	1
Selenium	< 0.010 ~~0.0055~~	~~J B~~ UB	0.010	0.0046	mg/L		05/02/16 09:28	05/03/16 19:18	1
Silver	<0.0050		0.0050	0.0013	mg/L		05/02/16 09:28	05/03/16 19:18	1
Sodium	3300		100	43	mg/L		05/02/16 09:28	05/05/16 15:46	100
Thallium	<0.010		0.010	0.0028	mg/L		05/02/16 09:28	05/03/16 19:18	1
Vanadium	0.054		0.0050	0.0019	mg/L		05/02/16 09:28	05/03/16 19:18	1
Zinc	0.12	J	0.020	0.0090	mg/L		05/02/16 09:28	05/03/16 19:18	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020		0.00020	0.00011	mg/L		05/04/16 15:00	05/05/16 11:31	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/04/16 15:00	05/05/16 11:33	1

Client Sample ID: MW-6-GW-04292016

Date Collected: 04/29/16 08:47
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-3

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**7.9**	J	1.0	0.22	mg/L			05/03/16 05:44	1
Sulfate	**21**		10	4.0	mg/L			05/02/16 09:05	2
Total Organic Carbon - Duplicates	**360**		20	4.6	mg/L			05/13/16 22:58	20
Nitrogen, Nitrate	<0.10		0.10	0.045	mg/L			05/13/16 15:09	1
Total Suspended Solids	**17**		5.0	1.6	mg/L			05/03/16 11:47	1
Ammonia	**530**	B	40	8.6	mg/L		05/11/16 18:12	05/12/16 20:12	200
Nitrogen, Nitrite	**0.014**	J	0.020	0.0032	mg/L			04/30/16 12:21	1
Nitrogen, Nitrate Nitrite	<0.20		0.20	0.090	mg/L			05/12/16 09:36	2

Client Sample ID: MW-7-GW-04292016

Date Collected: 04/29/16 10:47
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**54**		5.0	1.7	ug/L			05/12/16 20:06	1
Benzene	**10**		0.50	0.15	ug/L			05/12/16 20:06	1
Bromodichloromethane	<1.0		1.0	0.37	ug/L			05/12/16 20:06	1
Bromoform	<1.0	UJ	1.0	0.48	ug/L			05/12/16 20:06	1
Bromomethane	<2.0		2.0	0.80	ug/L			05/12/16 20:06	1
Carbon disulfide	<2.0		2.0	0.45	ug/L			05/12/16 20:06	1
Carbon tetrachloride	<1.0		1.0	0.38	ug/L			05/12/16 20:06	1
Chlorobenzene	<1.0		1.0	0.39	ug/L			05/12/16 20:06	1
Chloroethane	<1.0		1.0	0.51	ug/L			05/12/16 20:06	1
Chloroform	<1.0		1.0	0.37	ug/L			05/12/16 20:06	1
Chloromethane	<1.0		1.0	0.32	ug/L			05/12/16 20:06	1
cis-1,2-Dichloroethene	**8.5**		1.0	0.41	ug/L			05/12/16 20:06	1
cis-1,3-Dichloropropene	<1.0		1.0	0.42	ug/L			05/12/16 20:06	1
Cyclohexane	<1.0		1.0	0.49	ug/L			05/12/16 20:06	1
Dibromochloromethane	<1.0		1.0	0.49	ug/L			05/12/16 20:06	1
1,2-Dibromo-3-Chloropropane	<5.0	UJ	5.0	2.0	ug/L			05/12/16 20:06	1
1,2-Dibromoethane	<1.0		1.0	0.39	ug/L			05/12/16 20:06	1
1,2-Dichlorobenzene	**6.8**		1.0	0.33	ug/L			05/12/16 20:06	1
1,3-Dichlorobenzene	<1.0		1.0	0.40	ug/L			05/12/16 20:06	1
1,4-Dichlorobenzene	**17**		1.0	0.36	ug/L			05/12/16 20:06	1
Dichlorodifluoromethane	<2.0		2.0	0.67	ug/L			05/12/16 20:06	1
1,1-Dichloroethane	<1.0		1.0	0.41	ug/L			05/12/16 20:06	1
1,2-Dichloroethane	<1.0		1.0	0.39	ug/L			05/12/16 20:06	1
1,1-Dichloroethene	<1.0		1.0	0.39	ug/L			05/12/16 20:06	1
1,2-Dichloropropane	<1.0		1.0	0.43	ug/L			05/12/16 20:06	1
Ethylbenzene	**150**		0.50	0.18	ug/L			05/12/16 20:06	1
2-Hexanone	<5.0	UJ	5.0	1.6	ug/L			05/12/16 20:06	1
Isopropylbenzene	**9.6**		1.0	0.39	ug/L			05/12/16 20:06	1
Methyl acetate	<5.0		5.0	2.0	ug/L			05/12/16 20:06	1
Methylcyclohexane	**1.3**		1.0	0.32	ug/L			05/12/16 20:06	1
Methylene Chloride	<5.0		5.0	1.6	ug/L			05/12/16 20:06	1
Methyl Ethyl Ketone	**16**	J	5.0	2.1	ug/L			05/12/16 20:06	1
methyl isobutyl ketone	**63**	J	5.0	2.2	ug/L			05/12/16 20:06	1
Methyl tert-butyl ether	<1.0		1.0	0.39	ug/L			05/12/16 20:06	1
Styrene	<1.0		1.0	0.39	ug/L			05/12/16 20:06	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.40	ug/L			05/12/16 20:06	1
Tetrachloroethene	<1.0		1.0	0.37	ug/L			05/12/16 20:06	1
trans-1,2-Dichloroethene	<1.0		1.0	0.35	ug/L			05/12/16 20:06	1
trans-1,3-Dichloropropene	<1.0		1.0	0.36	ug/L			05/12/16 20:06	1
1,2,4-Trichlorobenzene	<1.0		1.0	0.34	ug/L			05/12/16 20:06	1
1,1,1-Trichloroethane	<1.0		1.0	0.38	ug/L			05/12/16 20:06	1
1,1,2-Trichloroethane	<1.0		1.0	0.35	ug/L			05/12/16 20:06	1
Trichloroethene	<0.50		0.50	0.16	ug/L			05/12/16 20:06	1
Trichlorofluoromethane	<1.0		1.0	0.43	ug/L			05/12/16 20:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0	0.46	ug/L			05/12/16 20:06	1
Vinyl chloride	**13**		0.50	0.20	ug/L			05/12/16 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*71 - 120*		*05/12/16 20:06*	*1*

Client Sample ID: MW-7-GW-04292016

Date Collected: 04/29/16 10:47
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*93*		*70 - 120*		*05/12/16 20:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*71 - 127*		*05/12/16 20:06*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*05/12/16 20:06*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**410**	D	2.5	0.76	ug/L			05/12/16 20:32	5
Xylenes, Total	**760**	D	5.0	1.1	ug/L			05/12/16 20:32	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*71 - 120*		*05/12/16 20:32*	*5*
Dibromofluoromethane	*95*		*70 - 120*		*05/12/16 20:32*	*5*
1,2-Dichloroethane-d4 (Surr)	*95*		*71 - 127*		*05/12/16 20:32*	*5*
Toluene-d8 (Surr)	*102*		*75 - 120*		*05/12/16 20:32*	*5*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<8.4		8.4	2.6	ug/L		05/05/16 08:14	05/13/16 09:54	10
Acenaphthylene	<8.4		8.4	2.3	ug/L		05/05/16 08:14	05/13/16 09:54	10
Acetophenone	<42		42	5.6	ug/L		05/05/16 08:14	05/13/16 09:54	10
Anthracene	**2.8**	J D	8.4	2.8	ug/L		05/05/16 08:14	05/13/16 09:54	10
Benzo[a]anthracene	<1.7		1.7	0.48	ug/L		05/05/16 08:14	05/13/16 09:54	10
Benzo[a]pyrene	<1.7		1.7	0.83	ug/L		05/05/16 08:14	05/13/16 09:54	10
Benzo[b]fluoranthene	<1.7		1.7	0.68	ug/L		05/05/16 08:14	05/13/16 09:54	10
Benzo[g,h,i]perylene	<8.4		8.4	3.2	ug/L		05/05/16 08:14	05/13/16 09:54	10
Benzo[k]fluoranthene	<1.7		1.7	0.54	ug/L		05/05/16 08:14	05/13/16 09:54	10
Bis(2-chloroethoxy)methane	<17		17	2.4	ug/L		05/05/16 08:14	05/13/16 09:54	10
Bis(2-chloroethyl)ether	<17		17	2.5	ug/L		05/05/16 08:14	05/13/16 09:54	10
Bis(2-ethylhexyl) phthalate	**290**	D	84	14	ug/L		05/05/16 08:14	05/13/16 09:54	10
4-Bromophenyl phenyl ether	<42		42	4.5	ug/L		05/05/16 08:14	05/13/16 09:54	10
Butyl benzyl phthalate	<17		17	4.0	ug/L		05/05/16 08:14	05/13/16 09:54	10
Carbazole	**4.8**	J D	42	3.0	ug/L		05/05/16 08:14	05/13/16 09:54	10
4-Chloroaniline	<84	UJ	84	17	ug/L		05/05/16 08:14	05/13/16 09:54	10
4-Chloro-3-methylphenol	<84		84	19	ug/L		05/05/16 08:14	05/13/16 09:54	10
2-Chloronaphthalene	<17		17	2.0	ug/L		05/05/16 08:14	05/13/16 09:54	10
2-Chlorophenol	<42		42	4.7	ug/L		05/05/16 08:14	05/13/16 09:54	10
4-Chlorophenyl phenyl ether	<42		42	5.3	ug/L		05/05/16 08:14	05/13/16 09:54	10
Chrysene	<4.2		4.2	0.57	ug/L		05/05/16 08:14	05/13/16 09:54	10
Dibenz(a,h)anthracene	<2.5		2.5	0.43	ug/L		05/05/16 08:14	05/13/16 09:54	10
Dibenzofuran	<17		17	2.2	ug/L		05/05/16 08:14	05/13/16 09:54	10
3,3'-Dichlorobenzidine	<42		42	14	ug/L		05/05/16 08:14	05/13/16 09:54	10
2,4-Dichlorophenol	<84		84	22	ug/L		05/05/16 08:14	05/13/16 09:54	10
Diethyl phthalate	<17		17	3.0	ug/L		05/05/16 08:14	05/13/16 09:54	10
2,4-Dimethylphenol	**470**	JD	84	15	ug/L		05/05/16 08:14	05/13/16 09:54	10
Dimethyl phthalate	<17		17	2.6	ug/L		05/05/16 08:14	05/13/16 09:54	10
Di-n-butyl phthalate	<42		42	6.1	ug/L		05/05/16 08:14	05/13/16 09:54	10
4,6-Dinitro-2-methylphenol	<170		170	50	ug/L		05/05/16 08:14	05/13/16 09:54	10
2,4-Dinitrophenol	<170		170	72	ug/L		05/05/16 08:14	05/13/16 09:54	10
2,4-Dinitrotoluene	<8.4		8.4	2.1	ug/L		05/05/16 08:14	05/13/16 09:54	10
2,6-Dinitrotoluene	<4.2		4.2	0.62	ug/L		05/05/16 08:14	05/13/16 09:54	10

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Lab Sample ID: 500-110948-4

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	<84		84	8.8	ug/L		05/05/16 08:14	05/13/16 09:54	10
Fluoranthene	**8.8**	D	8.4	3.8	ug/L		05/05/16 08:14	05/13/16 09:54	10
Fluorene	**3.2**	J D	8.4	2.1	ug/L		05/05/16 08:14	05/13/16 09:54	10
Hexachlorobenzene	<4.2		4.2	0.67	ug/L		05/05/16 08:14	05/13/16 09:54	10
Hexachlorobutadiene	<42		42	4.3	ug/L		05/05/16 08:14	05/13/16 09:54	10
Hexachlorocyclopentadiene	<170		170	54	ug/L		05/05/16 08:14	05/13/16 09:54	10
Hexachloroethane	<42		42	5.0	ug/L		05/05/16 08:14	05/13/16 09:54	10
Indeno[1,2,3-cd]pyrene	<1.7		1.7	0.63	ug/L		05/05/16 08:14	05/13/16 09:54	10
Isophorone	<17		17	3.2	ug/L		05/05/16 08:14	05/13/16 09:54	10
2-Methylnaphthalene	**9.4**	D	4.2	0.55	ug/L		05/05/16 08:14	05/13/16 09:54	10
2-Methylphenol	**78**	D	17	2.6	ug/L		05/05/16 08:14	05/13/16 09:54	10
3 & 4 Methylphenol	**280**	D	17	3.8	ug/L		05/05/16 08:14	05/13/16 09:54	10
Naphthalene	**48**	D	8.4	2.6	ug/L		05/05/16 08:14	05/13/16 09:54	10
2-Nitroaniline	<42		42	11	ug/L		05/05/16 08:14	05/13/16 09:54	10
3-Nitroaniline	<84		84	15	ug/L		05/05/16 08:14	05/13/16 09:54	10
4-Nitroaniline	<84		84	14	ug/L		05/05/16 08:14	05/13/16 09:54	10
Nitrobenzene	<8.4		8.4	3.8	ug/L		05/05/16 08:14	05/13/16 09:54	10
2-Nitrophenol	<84		84	21	ug/L		05/05/16 08:14	05/13/16 09:54	10
4-Nitrophenol	<170		170	63	ug/L		05/05/16 08:14	05/13/16 09:54	10
N-Nitrosodi-n-propylamine	<4.2		4.2	1.3	ug/L		05/05/16 08:14	05/13/16 09:54	10
N-Nitrosodiphenylamine	<8.4		8.4	3.1	ug/L		05/05/16 08:14	05/13/16 09:54	10
2,2'-oxybis[1-chloropropane]	<17		17	3.2	ug/L		05/05/16 08:14	05/13/16 09:54	10
Pentachlorophenol	<170		170	33	ug/L		05/05/16 08:14	05/13/16 09:54	10
Phenanthrene	**14**	D	8.4	2.5	ug/L		05/05/16 08:14	05/13/16 09:54	10
Phenol	<42		42	5.7	ug/L		05/05/16 08:14	05/13/16 09:54	10
Pyrene	**8.0**	J D	8.4	3.6	ug/L		05/05/16 08:14	05/13/16 09:54	10
2,4,5-Trichlorophenol	<84		84	22	ug/L		05/05/16 08:14	05/13/16 09:54	10
2,4,6-Trichlorophenol	<42		42	6.0	ug/L		05/05/16 08:14	05/13/16 09:54	10
Benzaldehyde	<170 *	R	170	130	ug/L		05/05/16 08:14	05/13/16 09:54	10
Caprolactam	<84		84	13	ug/L		05/05/16 08:14	05/13/16 09:54	10
Atrazine	<42		42	5.3	ug/L		05/05/16 08:14	05/13/16 09:54	10
1,1'-Biphenyl	<42		42	3.1	ug/L		05/05/16 08:14	05/13/16 09:54	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*30 - 123*	*05/05/16 08:14*	*05/13/16 09:54*	*10*
2-Fluorophenol (Surr)	*64*		*30 - 110*	*05/05/16 08:14*	*05/13/16 09:54*	*10*
Nitrobenzene-d5 (Surr)	*87*		*33 - 139*	*05/05/16 08:14*	*05/13/16 09:54*	*10*
Phenol-d5 (Surr)	*63*		*20 - 100*	*05/05/16 08:14*	*05/13/16 09:54*	*10*
Terphenyl-d14 (Surr)	*91*		*42 - 150*	*05/05/16 08:14*	*05/13/16 09:54*	*10*
2,4,6-Tribromophenol (Surr)	*101*		*30 - 150*	*05/05/16 08:14*	*05/13/16 09:54*	*10*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.041	R	0.041	0.0055	ug/L		05/02/16 16:20	05/03/16 16:33	1
alpha-BHC	<0.041		0.041	0.0027	ug/L		05/02/16 16:20	05/03/16 16:33	1
alpha-Chlordane	<0.041		0.041	0.0045	ug/L		05/02/16 16:20	05/03/16 16:33	1
beta-BHC	<0.041		0.041	0.010	ug/L		05/02/16 16:20	05/03/16 16:33	1
4,4'-DDD	<0.041		0.041	0.014	ug/L		05/02/16 16:20	05/03/16 16:33	1
4,4'-DDE	<0.041		0.041	0.0039	ug/L		05/02/16 16:20	05/03/16 16:33	1
4,4'-DDT	<0.041		0.041	0.0033	ug/L		05/02/16 16:20	05/03/16 16:33	1

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Lab Sample ID: 500-110948-4

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	<0.041	R	0.041	0.011	ug/L		05/02/16 16:20	05/03/16 16:33	1
Dieldrin	<0.041		0.041	0.013	ug/L		05/02/16 16:20	05/03/16 16:33	1
Endosulfan I	<0.041		0.041	0.0042	ug/L		05/02/16 16:20	05/03/16 16:33	1
Endosulfan II	<0.041		0.041	0.0029	ug/L		05/02/16 16:20	05/03/16 16:33	1
Endosulfan sulfate	<0.041		0.041	0.012	ug/L		05/02/16 16:20	05/03/16 16:33	1
Endrin	<0.041		0.041	0.015	ug/L		05/02/16 16:20	05/03/16 16:33	1
Endrin aldehyde	<0.041		0.041	0.0084	ug/L		05/02/16 16:20	05/03/16 16:33	1
Endrin ketone	<0.041		0.041	0.017	ug/L		05/02/16 16:20	05/03/16 16:33	1
gamma-BHC (Lindane)	<0.041		0.041	0.0058	ug/L		05/02/16 16:20	05/03/16 16:33	1
gamma-Chlordane	<0.041		0.041	0.0074	ug/L		05/02/16 16:20	05/03/16 16:33	1
Heptachlor	<0.041		0.041	0.014	ug/L		05/02/16 16:20	05/03/16 16:33	1
Heptachlor epoxide	<0.041		0.041	0.014	ug/L		05/02/16 16:20	05/03/16 16:33	1
Methoxychlor	<0.082		0.082	0.024	ug/L		05/02/16 16:20	05/03/16 16:33	1
Toxaphene	<0.41		0.41	0.21	ug/L		05/02/16 16:20	05/03/16 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*9*	*X*	*30 - 143*	*05/02/16 16:20*	*05/03/16 16:33*	*1*
Tetrachloro-m-xylene	*93*		*30 - 120*	*05/02/16 16:20*	*05/03/16 16:33*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.41		0.41	0.069	ug/L		05/02/16 16:20	05/03/16 17:52	1
PCB-1016	<0.41	UJ	0.41	0.069	ug/L		05/02/16 16:20	05/03/16 17:52	1
PCB-1221	<0.41		0.41	0.21	ug/L		05/02/16 16:20	05/03/16 17:52	1
PCB-1221	<0.41		0.41	0.21	ug/L		05/02/16 16:20	05/03/16 17:52	1
PCB-1232	<0.41		0.41	0.21	ug/L		05/02/16 16:20	05/03/16 17:52	1
PCB-1232	<0.41		0.41	0.21	ug/L		05/02/16 16:20	05/03/16 17:52	1
PCB-1242	<0.41		0.41	0.21	ug/L		05/02/16 16:20	05/03/16 17:52	1
PCB-1242	<0.41		0.41	0.21	ug/L		05/02/16 16:20	05/03/16 17:52	1
PCB-1248	<0.41		0.41	0.21	ug/L		05/02/16 16:20	05/03/16 17:52	1
PCB-1248	<0.41		0.41	0.21	ug/L		05/02/16 16:20	05/03/16 17:52	1
~~PCB-1254~~	~~2.1~~	J	0.41	0.21	ug/L		05/02/16 16:20	05/03/16 17:52	1
PCB-1254	**1.7**	J	0.41	0.21	ug/L		05/02/16 16:20	05/03/16 17:52	1
PCB-1260	<0.41	UJ	0.41	0.072	ug/L		05/02/16 16:20	05/03/16 17:52	1
PCB-1260	<0.41	UJ	0.41	0.072	ug/L		05/02/16 16:20	05/03/16 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*23*	*X*	*30 - 127*	*05/02/16 16:20*	*05/03/16 17:52*	*1*
Tetrachloro-m-xylene	*15*	*X*	*30 - 127*	*05/02/16 16:20*	*05/03/16 17:52*	*1*
DCB Decachlorobiphenyl	*13*	*X*	*30 - 150*	*05/02/16 16:20*	*05/03/16 17:52*	*1*
DCB Decachlorobiphenyl	*13*	*X*	*30 - 150*	*05/02/16 16:20*	*05/03/16 17:52*	*1*

~~Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography - RE~~

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.41	*	0.41	0.069	ug/L		05/04/16 16:40	05/12/16 11:03	1
PCB-1016	<0.41		0.41	0.069	ug/L		05/04/16 16:40	05/12/16 11:03	1
PCB-1221	<0.41		0.41	0.21	ug/L		05/04/16 16:40	05/12/16 11:03	1
PCB-1221	<0.41		0.41	0.21	ug/L		05/04/16 16:40	05/12/16 11:03	1
PCB-1232	<0.41		0.41	0.21	ug/L		05/04/16 16:40	05/12/16 11:03	1
PCB-1232	<0.41		0.41	0.21	ug/L		05/04/16 16:40	05/12/16 11:03	1

Client Sample ID: MW-7-GW-04292016

Date Collected: 04/29/16 10:47
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-4

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	<0.41		0.41	0.21	ug/L		05/04/16 16:40	05/12/16 11:03	1
PCB-1242	<0.41		0.41	0.21	ug/L		05/04/16 16:40	05/12/16 11:03	1
PCB-1248	<0.41		0.41	0.21	ug/L		05/04/16 16:40	05/12/16 11:03	1
PCB-1248	<0.41		0.41	0.21	ug/L		05/04/16 16:40	05/12/16 11:03	1
PCB-1254	**1.1**		0.41	0.21	ug/L		05/04/16 16:40	05/12/16 11:03	1
PCB-1254	**1.3**		0.41	0.21	ug/L		05/04/16 16:40	05/12/16 11:03	1
PCB-1260	<0.41	*	0.41	0.073	ug/L		05/04/16 16:40	05/12/16 11:03	1
PCB-1260	<0.41		0.41	0.073	ug/L		05/04/16 16:40	05/12/16 11:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*6*	*X*	*30 - 127*	*05/04/16 16:40*	*05/12/16 11:03*	*1*
Tetrachloro-m-xylene	*6*	*X*	*30 - 127*	*05/04/16 16:40*	*05/12/16 11:03*	*1*
DCB Decachlorobiphenyl	*2*	*X*	*30 - 150*	*05/04/16 16:40*	*05/12/16 11:03*	*1*
DCB Decachlorobiphenyl	*2*	*X*	*30 - 150*	*05/04/16 16:40*	*05/12/16 11:03*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1.9**		0.20	0.062	mg/L		05/02/16 09:28	05/03/16 19:23	1
Antimony	**0.015**	J	0.020	0.0064	mg/L		05/02/16 09:28	05/03/16 19:23	1
Arsenic	**0.048**		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:23	1
Barium	**0.54**		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:23	1
Beryllium	**0.0011**	J	0.0040	0.00085	mg/L		05/02/16 09:28	05/03/16 19:23	1
Cadmium	**0.0080**		0.0020	0.00094	mg/L		05/02/16 09:28	05/03/16 19:23	1
Calcium	**11**	J	0.20	0.059	mg/L		05/02/16 09:28	05/03/16 19:23	1
Chromium	**0.48**		0.010	0.0024	mg/L		05/02/16 09:28	05/03/16 19:23	1
Cobalt	**0.044**		0.0050	0.00096	mg/L		05/02/16 09:28	05/03/16 19:23	1
Copper	**0.082**		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:23	1
Iron	**4.7**	J	0.20	0.10	mg/L		05/02/16 09:28	05/03/16 19:23	1
Lead	**0.68**		0.0050	0.0024	mg/L		05/02/16 09:28	05/03/16 19:23	1
Magnesium	**22**		0.10	0.034	mg/L		05/02/16 09:28	05/03/16 19:23	1
Manganese	**0.017**		0.010	0.0034	mg/L		05/02/16 09:28	05/03/16 19:23	1
Nickel	**0.16**		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:23	1
Potassium	**670**		0.50	0.16	mg/L		05/02/16 09:28	05/03/16 19:23	1
Selenium	< 0.010 ~~0.0091 J B~~ UB		0.010	0.0046	mg/L		05/02/16 09:28	05/03/16 19:23	1
Silver	**0.0026**	J	0.0050	0.0013	mg/L		05/02/16 09:28	05/03/16 19:23	1
Sodium	**3600**		100	43	mg/L		05/02/16 09:28	05/05/16 15:51	100
Thallium	<0.010		0.010	0.0028	mg/L		05/02/16 09:28	05/03/16 19:23	1
Vanadium	**0.078**		0.0050	0.0019	mg/L		05/02/16 09:28	05/03/16 19:23	1
Zinc	**1.1**		0.020	0.0090	mg/L		05/02/16 09:28	05/03/16 19:23	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1.4**		0.20	0.062	mg/L		05/02/16 09:28	05/03/16 19:28	1
Antimony	**0.011**	J	0.020	0.0064	mg/L		05/02/16 09:28	05/03/16 19:28	1
Arsenic	**0.040**		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:28	1
Barium	**0.47**		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:28	1
Beryllium	**0.00085**	J	0.0040	0.00085	mg/L		05/02/16 09:28	05/03/16 19:28	1
Cadmium	**0.0057**		0.0020	0.00094	mg/L		05/02/16 09:28	05/03/16 19:28	1
Calcium	**10**	J	0.20	0.059	mg/L		05/02/16 09:28	05/03/16 19:28	1
Chromium	**0.43**		0.010	0.0024	mg/L		05/02/16 09:28	05/03/16 19:28	1

Client Sample ID: MW-7-GW-04292016

Date Collected: 04/29/16 10:47
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-4

Matrix: Water

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.041		0.0050	0.00096	mg/L		05/02/16 09:28	05/03/16 19:28	1
Copper	0.052		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:28	1
Iron	4.1	J	0.20	0.10	mg/L		05/02/16 09:28	05/03/16 19:28	1
Lead	0.39	J	0.0050	0.0024	mg/L		05/02/16 09:28	05/03/16 19:28	1
Magnesium	21		0.10	0.034	mg/L		05/02/16 09:28	05/03/16 19:28	1
Manganese	0.014		0.010	0.0034	mg/L		05/02/16 09:28	05/03/16 19:28	1
Nickel	0.15		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:28	1
Potassium	620		0.50	0.16	mg/L		05/02/16 09:28	05/03/16 19:28	1
Selenium	< 0.010 ~~0.0091 J B~~	UB	0.010	0.0046	mg/L		05/02/16 09:28	05/03/16 19:28	1
Silver	0.0016	J	0.0050	0.0013	mg/L		05/02/16 09:28	05/03/16 19:28	1
Sodium	3400		100	43	mg/L		05/02/16 09:28	05/05/16 15:55	100
Thallium	<0.010		0.010	0.0028	mg/L		05/02/16 09:28	05/03/16 19:28	1
Vanadium	0.068		0.0050	0.0019	mg/L		05/02/16 09:28	05/03/16 19:28	1
Zinc	0.67	J	0.020	0.0090	mg/L		05/02/16 09:28	05/03/16 19:28	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0010		0.00020	0.00011	mg/L		05/04/16 15:00	05/05/16 11:35	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00063		0.00020	0.00011	mg/L		05/04/16 15:00	05/05/16 11:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	8.8		1.0	0.22	mg/L			05/03/16 05:47	1
Sulfate	240		100	40	mg/L			05/05/16 07:46	20
Total Organic Carbon - Duplicates	480		20	4.6	mg/L			05/13/16 23:18	20
Nitrogen, Nitrate	<0.10		0.10	0.045	mg/L			05/13/16 15:09	1
Total Suspended Solids	17		5.0	1.6	mg/L			05/03/16 11:48	1
Ammonia	670	~~B~~	40	8.6	mg/L		05/11/16 18:12	05/12/16 20:14	200
Nitrogen, Nitrite	<0.020		0.020	0.0032	mg/L			04/30/16 12:22	1
Nitrogen, Nitrate Nitrite	<0.20		0.20	0.090	mg/L			05/12/16 09:38	2

Client Sample ID: MW-9-GW-04292016

Date Collected: 04/29/16 12:27
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**6.8**		5.0	1.7	ug/L			05/12/16 21:00	1
Benzene	**1.6**		0.50	0.15	ug/L			05/12/16 21:00	1
Bromodichloromethane	<1.0		1.0	0.37	ug/L			05/12/16 21:00	1
Bromoform	<1.0	UJ	1.0	0.48	ug/L			05/12/16 21:00	1
Bromomethane	<2.0		2.0	0.80	ug/L			05/12/16 21:00	1
Carbon disulfide	<2.0		2.0	0.45	ug/L			05/12/16 21:00	1
Carbon tetrachloride	<1.0		1.0	0.38	ug/L			05/12/16 21:00	1
Chlorobenzene	**15**		1.0	0.39	ug/L			05/12/16 21:00	1
Chloroethane	<1.0		1.0	0.51	ug/L			05/12/16 21:00	1
Chloroform	<1.0		1.0	0.37	ug/L			05/12/16 21:00	1
Chloromethane	<1.0		1.0	0.32	ug/L			05/12/16 21:00	1
cis-1,2-Dichloroethene	<1.0		1.0	0.41	ug/L			05/12/16 21:00	1
cis-1,3-Dichloropropene	<1.0		1.0	0.42	ug/L			05/12/16 21:00	1
Cyclohexane	**1.5**		1.0	0.49	ug/L			05/12/16 21:00	1
Dibromochloromethane	<1.0		1.0	0.49	ug/L			05/12/16 21:00	1
1,2-Dibromo-3-Chloropropane	<5.0	UJ	5.0	2.0	ug/L			05/12/16 21:00	1
1,2-Dibromoethane	<1.0		1.0	0.39	ug/L			05/12/16 21:00	1
1,2-Dichlorobenzene	<1.0		1.0	0.33	ug/L			05/12/16 21:00	1
1,3-Dichlorobenzene	<1.0		1.0	0.40	ug/L			05/12/16 21:00	1
1,4-Dichlorobenzene	**1.7**		1.0	0.36	ug/L			05/12/16 21:00	1
Dichlorodifluoromethane	<2.0		2.0	0.67	ug/L			05/12/16 21:00	1
1,1-Dichloroethane	<1.0		1.0	0.41	ug/L			05/12/16 21:00	1
1,2-Dichloroethane	<1.0		1.0	0.39	ug/L			05/12/16 21:00	1
1,1-Dichloroethene	<1.0		1.0	0.39	ug/L			05/12/16 21:00	1
1,2-Dichloropropane	<1.0		1.0	0.43	ug/L			05/12/16 21:00	1
Ethylbenzene	<0.50		0.50	0.18	ug/L			05/12/16 21:00	1
2-Hexanone	<5.0	UJ	5.0	1.6	ug/L			05/12/16 21:00	1
Isopropylbenzene	**3.5**		1.0	0.39	ug/L			05/12/16 21:00	1
Methyl acetate	<5.0		5.0	2.0	ug/L			05/12/16 21:00	1
Methylcyclohexane	**1.3**		1.0	0.32	ug/L			05/12/16 21:00	1
Methylene Chloride	<5.0		5.0	1.6	ug/L			05/12/16 21:00	1
Methyl Ethyl Ketone	<5.0	UJ	5.0	2.1	ug/L			05/12/16 21:00	1
methyl isobutyl ketone	<5.0	UJ	5.0	2.2	ug/L			05/12/16 21:00	1
Methyl tert-butyl ether	<1.0		1.0	0.39	ug/L			05/12/16 21:00	1
Styrene	<1.0		1.0	0.39	ug/L			05/12/16 21:00	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.40	ug/L			05/12/16 21:00	1
Tetrachloroethene	<1.0		1.0	0.37	ug/L			05/12/16 21:00	1
Toluene	**0.37**	**J**	0.50	0.15	ug/L			05/12/16 21:00	1
trans-1,2-Dichloroethene	<1.0		1.0	0.35	ug/L			05/12/16 21:00	1
trans-1,3-Dichloropropene	<1.0		1.0	0.36	ug/L			05/12/16 21:00	1
1,2,4-Trichlorobenzene	<1.0		1.0	0.34	ug/L			05/12/16 21:00	1
1,1,1-Trichloroethane	<1.0		1.0	0.38	ug/L			05/12/16 21:00	1
1,1,2-Trichloroethane	<1.0		1.0	0.35	ug/L			05/12/16 21:00	1
Trichloroethene	<0.50		0.50	0.16	ug/L			05/12/16 21:00	1
Trichlorofluoromethane	<1.0		1.0	0.43	ug/L			05/12/16 21:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0	0.46	ug/L			05/12/16 21:00	1
Vinyl chloride	<0.50		0.50	0.20	ug/L			05/12/16 21:00	1
Xylenes, Total	**0.93**	**J**	1.0	0.22	ug/L			05/12/16 21:00	1

Client Sample ID: MW-9-GW-04292016

Date Collected: 04/29/16 12:27
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-5

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*71 - 120*		*05/12/16 21:00*	*1*
Dibromofluoromethane	*94*		*70 - 120*		*05/12/16 21:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*71 - 127*		*05/12/16 21:00*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*05/12/16 21:00*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.97**		0.85	0.26	ug/L		05/05/16 08:14	05/14/16 02:12	1
Acenaphthylene	<0.85		0.85	0.23	ug/L		05/05/16 08:14	05/14/16 02:12	1
Acetophenone	<4.2		4.2	0.56	ug/L		05/05/16 08:14	05/14/16 02:12	1
Anthracene	<0.85		0.85	0.28	ug/L		05/05/16 08:14	05/14/16 02:12	1
Benzo[a]anthracene	<0.17		0.17	0.048	ug/L		05/05/16 08:14	05/14/16 02:12	1
Benzo[a]pyrene	<0.17		0.17	0.084	ug/L		05/05/16 08:14	05/14/16 02:12	1
Benzo[b]fluoranthene	<0.17		0.17	0.068	ug/L		05/05/16 08:14	05/14/16 02:12	1
Benzo[g,h,i]perylene	<0.85		0.85	0.32	ug/L		05/05/16 08:14	05/14/16 02:12	1
Benzo[k]fluoranthene	<0.17		0.17	0.054	ug/L		05/05/16 08:14	05/14/16 02:12	1
Bis(2-chloroethoxy)methane	<1.7		1.7	0.24	ug/L		05/05/16 08:14	05/14/16 02:12	1
Bis(2-chloroethyl)ether	<1.7		1.7	0.25	ug/L		05/05/16 08:14	05/14/16 02:12	1
Bis(2-ethylhexyl) phthalate	<8.5		8.5	1.5	ug/L		05/05/16 08:14	05/14/16 02:12	1
4-Bromophenyl phenyl ether	<4.2		4.2	0.46	ug/L		05/05/16 08:14	05/14/16 02:12	1
Butyl benzyl phthalate	<1.7		1.7	0.41	ug/L		05/05/16 08:14	05/14/16 02:12	1
Carbazole	<4.2		4.2	0.30	ug/L		05/05/16 08:14	05/14/16 02:12	1
4-Chloroaniline	<8.5	UJ	8.5	1.7	ug/L		05/05/16 08:14	05/14/16 02:12	1
4-Chloro-3-methylphenol	<8.5		8.5	2.0	ug/L		05/05/16 08:14	05/14/16 02:12	1
2-Chloronaphthalene	<1.7		1.7	0.20	ug/L		05/05/16 08:14	05/14/16 02:12	1
2-Chlorophenol	<4.2		4.2	0.47	ug/L		05/05/16 08:14	05/14/16 02:12	1
4-Chlorophenyl phenyl ether	<4.2		4.2	0.54	ug/L		05/05/16 08:14	05/14/16 02:12	1
Chrysene	<0.42		0.42	0.058	ug/L		05/05/16 08:14	05/14/16 02:12	1
Dibenz(a,h)anthracene	<0.25		0.25	0.043	ug/L		05/05/16 08:14	05/14/16 02:12	1
Dibenzofuran	<1.7		1.7	0.22	ug/L		05/05/16 08:14	05/14/16 02:12	1
3,3'-Dichlorobenzidine	<4.2		4.2	1.5	ug/L		05/05/16 08:14	05/14/16 02:12	1
2,4-Dichlorophenol	<8.5		8.5	2.2	ug/L		05/05/16 08:14	05/14/16 02:12	1
Diethyl phthalate	<1.7		1.7	0.31	ug/L		05/05/16 08:14	05/14/16 02:12	1
2,4-Dimethylphenol	<8.5	UJ	8.5	1.5	ug/L		05/05/16 08:14	05/14/16 02:12	1
Dimethyl phthalate	<1.7		1.7	0.27	ug/L		05/05/16 08:14	05/14/16 02:12	1
Di-n-butyl phthalate	<4.2		4.2	0.62	ug/L		05/05/16 08:14	05/14/16 02:12	1
4,6-Dinitro-2-methylphenol	<17		17	5.0	ug/L		05/05/16 08:14	05/14/16 02:12	1
2,4-Dinitrophenol	<17		17	7.3	ug/L		05/05/16 08:14	05/14/16 02:12	1
2,4-Dinitrotoluene	<0.85		0.85	0.21	ug/L		05/05/16 08:14	05/14/16 02:12	1
2,6-Dinitrotoluene	<0.42		0.42	0.063	ug/L		05/05/16 08:14	05/14/16 02:12	1
Di-n-octyl phthalate	<8.5		8.5	0.89	ug/L		05/05/16 08:14	05/14/16 02:12	1
Fluoranthene	<0.85		0.85	0.39	ug/L		05/05/16 08:14	05/14/16 02:12	1
Fluorene	**0.46**	J	0.85	0.21	ug/L		05/05/16 08:14	05/14/16 02:12	1
Hexachlorobenzene	<0.42		0.42	0.067	ug/L		05/05/16 08:14	05/14/16 02:12	1
Hexachlorobutadiene	<4.2		4.2	0.44	ug/L		05/05/16 08:14	05/14/16 02:12	1
Hexachlorocyclopentadiene	<17		17	5.4	ug/L		05/05/16 08:14	05/14/16 02:12	1
Hexachloroethane	<4.2		4.2	0.51	ug/L		05/05/16 08:14	05/14/16 02:12	1
Indeno[1,2,3-cd]pyrene	<0.17		0.17	0.063	ug/L		05/05/16 08:14	05/14/16 02:12	1
Isophorone	<1.7		1.7	0.32	ug/L		05/05/16 08:14	05/14/16 02:12	1
2-Methylnaphthalene	**2.6**		0.42	0.055	ug/L		05/05/16 08:14	05/14/16 02:12	1

Client Sample ID: MW-9-GW-04292016

Date Collected: 04/29/16 12:27
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-5

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	<1.7		1.7	0.26	ug/L		05/05/16 08:14	05/14/16 02:12	1
3 & 4 Methylphenol	**4.5**		1.7	0.38	ug/L		05/05/16 08:14	05/14/16 02:12	1
Naphthalene	**0.36**	**J**	0.85	0.26	ug/L		05/05/16 08:14	05/14/16 02:12	1
2-Nitroaniline	<4.2		4.2	1.1	ug/L		05/05/16 08:14	05/14/16 02:12	1
3-Nitroaniline	<8.5		8.5	1.5	ug/L		05/05/16 08:14	05/14/16 02:12	1
4-Nitroaniline	<8.5		8.5	1.4	ug/L		05/05/16 08:14	05/14/16 02:12	1
Nitrobenzene	<0.85		0.85	0.38	ug/L		05/05/16 08:14	05/14/16 02:12	1
2-Nitrophenol	<8.5		8.5	2.1	ug/L		05/05/16 08:14	05/14/16 02:12	1
4-Nitrophenol	<17		17	6.3	ug/L		05/05/16 08:14	05/14/16 02:12	1
N-Nitrosodi-n-propylamine	<0.42		0.42	0.13	ug/L		05/05/16 08:14	05/14/16 02:12	1
N-Nitrosodiphenylamine	<0.85		0.85	0.31	ug/L		05/05/16 08:14	05/14/16 02:12	1
2,2'-oxybis[1-chloropropane]	<1.7		1.7	0.32	ug/L		05/05/16 08:14	05/14/16 02:12	1
Pentachlorophenol	<17		17	3.3	ug/L		05/05/16 08:14	05/14/16 02:12	1
Phenanthrene	**0.48**	**J**	0.85	0.26	ug/L		05/05/16 08:14	05/14/16 02:12	1
Phenol	<4.2		4.2	0.57	ug/L		05/05/16 08:14	05/14/16 02:12	1
Pyrene	<0.85		0.85	0.36	ug/L		05/05/16 08:14	05/14/16 02:12	1
2,4,5-Trichlorophenol	<8.5		8.5	2.2	ug/L		05/05/16 08:14	05/14/16 02:12	1
2,4,6-Trichlorophenol	<4.2		4.2	0.61	ug/L		05/05/16 08:14	05/14/16 02:12	1
Benzaldehyde	<17	UJ	17	13	ug/L		05/05/16 08:14	05/14/16 02:12	1
Caprolactam	<8.5		8.5	1.3	ug/L		05/05/16 08:14	05/14/16 02:12	1
Atrazine	<4.2		4.2	0.53	ug/L		05/05/16 08:14	05/14/16 02:12	1
1,1'-Biphenyl	<4.2		4.2	0.31	ug/L		05/05/16 08:14	05/14/16 02:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*30 - 123*	*05/05/16 08:14*	*05/14/16 02:12*	*1*
2-Fluorophenol (Surr)	*55*		*30 - 110*	*05/05/16 08:14*	*05/14/16 02:12*	*1*
Nitrobenzene-d5 (Surr)	*58*		*33 - 139*	*05/05/16 08:14*	*05/14/16 02:12*	*1*
Phenol-d5 (Surr)	*45*		*20 - 100*	*05/05/16 08:14*	*05/14/16 02:12*	*1*
Terphenyl-d14 (Surr)	*91*		*42 - 150*	*05/05/16 08:14*	*05/14/16 02:12*	*1*
2,4,6-Tribromophenol (Surr)	*88*		*30 - 150*	*05/05/16 08:14*	*05/14/16 02:12*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.043		0.043	0.0057	ug/L		05/02/16 16:20	05/03/16 16:52	1
alpha-BHC	<0.043		0.043	0.0028	ug/L		05/02/16 16:20	05/03/16 16:52	1
alpha-Chlordane	<0.043		0.043	0.0047	ug/L		05/02/16 16:20	05/03/16 16:52	1
beta-BHC	<0.043		0.043	0.011	ug/L		05/02/16 16:20	05/03/16 16:52	1
4,4'-DDD	<0.043		0.043	0.014	ug/L		05/02/16 16:20	05/03/16 16:52	1
4,4'-DDE	<0.043		0.043	0.0041	ug/L		05/02/16 16:20	05/03/16 16:52	1
4,4'-DDT	<0.043		0.043	0.0034	ug/L		05/02/16 16:20	05/03/16 16:52	1
delta-BHC	<0.043		0.043	0.011	ug/L		05/02/16 16:20	05/03/16 16:52	1
Dieldrin	<0.043		0.043	0.014	ug/L		05/02/16 16:20	05/03/16 16:52	1
Endosulfan I	<0.043		0.043	0.0044	ug/L		05/02/16 16:20	05/03/16 16:52	1
Endosulfan II	<0.043		0.043	0.0030	ug/L		05/02/16 16:20	05/03/16 16:52	1
Endosulfan sulfate	<0.043		0.043	0.013	ug/L		05/02/16 16:20	05/03/16 16:52	1
Endrin	<0.043		0.043	0.015	ug/L		05/02/16 16:20	05/03/16 16:52	1
Endrin aldehyde	<0.043		0.043	0.0088	ug/L		05/02/16 16:20	05/03/16 16:52	1
Endrin ketone	<0.043		0.043	0.018	ug/L		05/02/16 16:20	05/03/16 16:52	1
gamma-BHC (Lindane)	<0.043		0.043	0.0060	ug/L		05/02/16 16:20	05/03/16 16:52	1
gamma-Chlordane	<0.043		0.043	0.0078	ug/L		05/02/16 16:20	05/03/16 16:52	1

Client Sample ID: MW-9-GW-04292016

Date Collected: 04/29/16 12:27
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-5

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	<0.043		0.043	0.015	ug/L		05/02/16 16:20	05/03/16 16:52	1
Heptachlor epoxide	<0.043		0.043	0.015	ug/L		05/02/16 16:20	05/03/16 16:52	1
Methoxychlor	<0.086		0.086	0.025	ug/L		05/02/16 16:20	05/03/16 16:52	1
Toxaphene	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*55*		*30 - 143*	*05/02/16 16:20*	*05/03/16 16:52*	*1*
Tetrachloro-m-xylene	*69*		*30 - 120*	*05/02/16 16:20*	*05/03/16 16:52*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.43		0.43	0.072	ug/L		05/02/16 16:20	05/03/16 18:08	1
PCB-1221	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 18:08	1
PCB-1232	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 18:08	1
PCB-1242	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 18:08	1
PCB-1248	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 18:08	1
PCB-1254	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 18:08	1
PCB-1260	<0.43		0.43	0.075	ug/L		05/02/16 16:20	05/03/16 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*30 - 127*	*05/02/16 16:20*	*05/03/16 18:08*	*1*
DCB Decachlorobiphenyl	*62*		*30 - 150*	*05/02/16 16:20*	*05/03/16 18:08*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		05/02/16 09:28	05/03/16 19:34	1
Antimony	<0.020		0.020	0.0064	mg/L		05/02/16 09:28	05/03/16 19:34	1
Arsenic	<0.010		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:34	1
Barium	**0.79**		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:34	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		05/02/16 09:28	05/03/16 19:34	1
Cadmium	**0.0011**	**J**	0.0020	0.00094	mg/L		05/02/16 09:28	05/03/16 19:34	1
Calcium	**130**	J	0.20	0.059	mg/L		05/02/16 09:28	05/03/16 19:34	1
Chromium	**0.0028**	**J**	0.010	0.0024	mg/L		05/02/16 09:28	05/03/16 19:34	1
Cobalt	<0.0050		0.0050	0.00096	mg/L		05/02/16 09:28	05/03/16 19:34	1
Copper	<0.010		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:34	1
Iron	**27**	J	0.20	0.10	mg/L		05/02/16 09:28	05/03/16 19:34	1
Lead	<0.0050		0.0050	0.0024	mg/L		05/02/16 09:28	05/03/16 19:34	1
Magnesium	**88**		0.10	0.034	mg/L		05/02/16 09:28	05/03/16 19:34	1
Manganese	**0.19**		0.010	0.0034	mg/L		05/02/16 09:28	05/03/16 19:34	1
Nickel	**0.0041**	**J**	0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:34	1
Potassium	**79**		0.50	0.16	mg/L		05/02/16 09:28	05/03/16 19:34	1
Selenium	<0.010		0.010	0.0046	mg/L		05/02/16 09:28	05/03/16 19:34	1
Silver	<0.0050		0.0050	0.0013	mg/L		05/02/16 09:28	05/03/16 19:34	1
Sodium	**200**		1.0	0.43	mg/L		05/02/16 09:28	05/03/16 19:34	1
Thallium	<0.010		0.010	0.0028	mg/L		05/02/16 09:28	05/03/16 19:34	1
Vanadium	<0.0050		0.0050	0.0019	mg/L		05/02/16 09:28	05/03/16 19:34	1
Zinc	<0.020		0.020	0.0090	mg/L		05/02/16 09:28	05/03/16 19:34	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		05/02/16 09:28	05/03/16 19:46	1

Client Sample ID: MW-9-GW-04292016 — Lab Sample ID: 500-110948-5

Date Collected: 04/29/16 12:27 — **Matrix: Water**
Date Received: 04/30/16 07:34

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.020		0.020	0.0064	mg/L		05/02/16 09:28	05/03/16 19:46	1
Arsenic	<0.010		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:46	1
Barium	**0.83**		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:46	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		05/02/16 09:28	05/03/16 19:46	1
Cadmium	**0.0016**	J	0.0020	0.00094	mg/L		05/02/16 09:28	05/03/16 19:46	1
Calcium	**130**	J	0.20	0.059	mg/L		05/02/16 09:28	05/03/16 19:46	1
Chromium	**0.0033**	J	0.010	0.0024	mg/L		05/02/16 09:28	05/03/16 19:46	1
Cobalt	<0.0050		0.0050	0.00096	mg/L		05/02/16 09:28	05/03/16 19:46	1
Copper	<0.010		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:46	1
Iron	**28**	J	0.20	0.10	mg/L		05/02/16 09:28	05/03/16 19:46	1
Lead	<0.0050	UJ	0.0050	0.0024	mg/L		05/02/16 09:28	05/03/16 19:46	1
Magnesium	**91**		0.10	0.034	mg/L		05/02/16 09:28	05/03/16 19:46	1
Manganese	**0.19**		0.010	0.0034	mg/L		05/02/16 09:28	05/03/16 19:46	1
Nickel	**0.0044**	J	0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:46	1
Potassium	**81**		0.50	0.16	mg/L		05/02/16 09:28	05/03/16 19:46	1
Selenium	<0.010		0.010	0.0046	mg/L		05/02/16 09:28	05/03/16 19:46	1
Silver	<0.0050		0.0050	0.0013	mg/L		05/02/16 09:28	05/03/16 19:46	1
Sodium	**210**		1.0	0.43	mg/L		05/02/16 09:28	05/03/16 19:46	1
Thallium	<0.010		0.010	0.0028	mg/L		05/02/16 09:28	05/03/16 19:46	1
Vanadium	<0.0050		0.0050	0.0019	mg/L		05/02/16 09:28	05/03/16 19:46	1
Zinc	<0.020	UJ	0.020	0.0090	mg/L		05/02/16 09:28	05/03/16 19:46	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/04/16 15:00	05/05/16 11:39	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/04/16 15:00	05/05/16 11:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**1.1**		1.0	0.22	mg/L			05/03/16 05:50	1
Sulfate	<5.0		5.0	2.0	mg/L			05/06/16 09:21	1
Total Organic Carbon - Duplicates	**25**		1.0	0.23	mg/L			05/13/16 23:39	1
Nitrogen, Nitrate	<0.10		0.10	0.045	mg/L			05/13/16 15:09	1
Total Suspended Solids	**52**		5.0	1.6	mg/L			05/03/16 11:50	1
Ammonia	**79**	B	5.0	1.1	mg/L		05/11/16 18:12	05/12/16 19:28	25
Nitrogen, Nitrite	<0.020		0.020	0.0032	mg/L			04/30/16 12:22	1
Nitrogen, Nitrate Nitrite	<0.10		0.10	0.045	mg/L			05/12/16 09:40	1

Client Sample ID: MW-8-GW-04292016

Date Collected: 04/29/16 14:02
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**6.2**		5.0	1.7	ug/L			05/12/16 21:26	1
Benzene	<0.50		0.50	0.15	ug/L			05/12/16 21:26	1
Bromodichloromethane	<1.0		1.0	0.37	ug/L			05/12/16 21:26	1
Bromoform	<1.0	UJ	1.0	0.48	ug/L			05/12/16 21:26	1
Bromomethane	<2.0	~~F2~~ UJ	2.0	0.80	ug/L			05/12/16 21:26	1
Carbon disulfide	<2.0		2.0	0.45	ug/L			05/12/16 21:26	1
Carbon tetrachloride	<1.0		1.0	0.38	ug/L			05/12/16 21:26	1
Chlorobenzene	<1.0		1.0	0.39	ug/L			05/12/16 21:26	1
Chloroethane	<1.0	~~F2~~ UJ	1.0	0.51	ug/L			05/12/16 21:26	1
Chloroform	<1.0		1.0	0.37	ug/L			05/12/16 21:26	1
Chloromethane	<1.0	~~F2~~ UJ	1.0	0.32	ug/L			05/12/16 21:26	1
cis-1,2-Dichloroethene	<1.0		1.0	0.41	ug/L			05/12/16 21:26	1
cis-1,3-Dichloropropene	<1.0		1.0	0.42	ug/L			05/12/16 21:26	1
Cyclohexane	<1.0		1.0	0.49	ug/L			05/12/16 21:26	1
Dibromochloromethane	<1.0		1.0	0.49	ug/L			05/12/16 21:26	1
1,2-Dibromo-3-Chloropropane	<5.0	UJ	5.0	2.0	ug/L			05/12/16 21:26	1
1,2-Dibromoethane	<1.0		1.0	0.39	ug/L			05/12/16 21:26	1
1,2-Dichlorobenzene	<1.0		1.0	0.33	ug/L			05/12/16 21:26	1
1,3-Dichlorobenzene	<1.0		1.0	0.40	ug/L			05/12/16 21:26	1
1,4-Dichlorobenzene	<1.0		1.0	0.36	ug/L			05/12/16 21:26	1
Dichlorodifluoromethane	<2.0	~~F2~~ UJ	2.0	0.67	ug/L			05/12/16 21:26	1
1,1-Dichloroethane	<1.0		1.0	0.41	ug/L			05/12/16 21:26	1
1,2-Dichloroethane	<1.0		1.0	0.39	ug/L			05/12/16 21:26	1
1,1-Dichloroethene	<1.0		1.0	0.39	ug/L			05/12/16 21:26	1
1,2-Dichloropropane	<1.0		1.0	0.43	ug/L			05/12/16 21:26	1
Ethylbenzene	**0.33**	**J**	0.50	0.18	ug/L			05/12/16 21:26	1
2-Hexanone	<5.0	UJ	5.0	1.6	ug/L			05/12/16 21:26	1
Isopropylbenzene	<1.0		1.0	0.39	ug/L			05/12/16 21:26	1
Methyl acetate	<5.0		5.0	2.0	ug/L			05/12/16 21:26	1
Methylcyclohexane	<1.0		1.0	0.32	ug/L			05/12/16 21:26	1
Methylene Chloride	<5.0		5.0	1.6	ug/L			05/12/16 21:26	1
Methyl Ethyl Ketone	<5.0	~~F2~~ UJ	5.0	2.1	ug/L			05/12/16 21:26	1
methyl isobutyl ketone	<5.0	~~F2~~ UJ	5.0	2.2	ug/L			05/12/16 21:26	1
Methyl tert-butyl ether	<1.0		1.0	0.39	ug/L			05/12/16 21:26	1
Styrene	<1.0		1.0	0.39	ug/L			05/12/16 21:26	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.40	ug/L			05/12/16 21:26	1
Tetrachloroethene	<1.0		1.0	0.37	ug/L			05/12/16 21:26	1
Toluene	<0.50		0.50	0.15	ug/L			05/12/16 21:26	1
trans-1,2-Dichloroethene	<1.0		1.0	0.35	ug/L			05/12/16 21:26	1
trans-1,3-Dichloropropene	<1.0		1.0	0.36	ug/L			05/12/16 21:26	1
1,2,4-Trichlorobenzene	<1.0		1.0	0.34	ug/L			05/12/16 21:26	1
1,1,1-Trichloroethane	<1.0		1.0	0.38	ug/L			05/12/16 21:26	1
1,1,2-Trichloroethane	<1.0		1.0	0.35	ug/L			05/12/16 21:26	1
Trichloroethene	<0.50		0.50	0.16	ug/L			05/12/16 21:26	1
Trichlorofluoromethane	<1.0	~~F2~~ UJ	1.0	0.43	ug/L			05/12/16 21:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0	0.46	ug/L			05/12/16 21:26	1
Vinyl chloride	<0.50	~~F2~~ UJ	0.50	0.20	ug/L			05/12/16 21:26	1
Xylenes, Total	**1.2**		1.0	0.22	ug/L			05/12/16 21:26	1

Client Sample ID: MW-8-GW-04292016

Date Collected: 04/29/16 14:02
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-6

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*71 - 120*		*05/12/16 21:26*	*1*
Dibromofluoromethane	*98*		*70 - 120*		*05/12/16 21:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*71 - 127*		*05/12/16 21:26*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*05/12/16 21:26*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.85		0.85	0.26	ug/L		05/05/16 08:14	05/13/16 03:06	1
Acenaphthylene	<0.85		0.85	0.23	ug/L		05/05/16 08:14	05/13/16 03:06	1
Acetophenone	<4.3		4.3	0.56	ug/L		05/05/16 08:14	05/13/16 03:06	1
Anthracene	<0.85		0.85	0.28	ug/L		05/05/16 08:14	05/13/16 03:06	1
Benzo[a]anthracene	<0.17		0.17	0.048	ug/L		05/05/16 08:14	05/13/16 03:06	1
Benzo[a]pyrene	<0.17		0.17	0.084	ug/L		05/05/16 08:14	05/13/16 03:06	1
Benzo[b]fluoranthene	<0.17		0.17	0.069	ug/L		05/05/16 08:14	05/13/16 03:06	1
Benzo[g,h,i]perylene	<0.85		0.85	0.32	ug/L		05/05/16 08:14	05/13/16 03:06	1
Benzo[k]fluoranthene	<0.17		0.17	0.054	ug/L		05/05/16 08:14	05/13/16 03:06	1
Bis(2-chloroethoxy)methane	<1.7		1.7	0.24	ug/L		05/05/16 08:14	05/13/16 03:06	1
Bis(2-chloroethyl)ether	<1.7		1.7	0.25	ug/L		05/05/16 08:14	05/13/16 03:06	1
Bis(2-ethylhexyl) phthalate	<8.5		8.5	1.5	ug/L		05/05/16 08:14	05/13/16 03:06	1
4-Bromophenyl phenyl ether	<4.3		4.3	0.46	ug/L		05/05/16 08:14	05/13/16 03:06	1
Butyl benzyl phthalate	<1.7		1.7	0.41	ug/L		05/05/16 08:14	05/13/16 03:06	1
Carbazole	<4.3		4.3	0.30	ug/L		05/05/16 08:14	05/13/16 03:06	1
4-Chloroaniline	<8.5	* UJ	8.5	1.7	ug/L		05/05/16 08:14	05/13/16 03:06	1
4-Chloro-3-methylphenol	<8.5		8.5	2.0	ug/L		05/05/16 08:14	05/13/16 03:06	1
2-Chloronaphthalene	<1.7		1.7	0.20	ug/L		05/05/16 08:14	05/13/16 03:06	1
2-Chlorophenol	<4.3		4.3	0.48	ug/L		05/05/16 08:14	05/13/16 03:06	1
4-Chlorophenyl phenyl ether	<4.3		4.3	0.54	ug/L		05/05/16 08:14	05/13/16 03:06	1
Chrysene	<0.43		0.43	0.058	ug/L		05/05/16 08:14	05/13/16 03:06	1
Dibenz(a,h)anthracene	<0.26		0.26	0.043	ug/L		05/05/16 08:14	05/13/16 03:06	1
Dibenzofuran	<1.7		1.7	0.22	ug/L		05/05/16 08:14	05/13/16 03:06	1
3,3'-Dichlorobenzidine	<4.3		4.3	1.5	ug/L		05/05/16 08:14	05/13/16 03:06	1
2,4-Dichlorophenol	<8.5		8.5	2.2	ug/L		05/05/16 08:14	05/13/16 03:06	1
Diethyl phthalate	<1.7		1.7	0.31	ug/L		05/05/16 08:14	05/13/16 03:06	1
2,4-Dimethylphenol	<8.5	* UJ	8.5	1.5	ug/L		05/05/16 08:14	05/13/16 03:06	1
Dimethyl phthalate	<1.7		1.7	0.27	ug/L		05/05/16 08:14	05/13/16 03:06	1
Di-n-butyl phthalate	<4.3		4.3	0.62	ug/L		05/05/16 08:14	05/13/16 03:06	1
4,6-Dinitro-2-methylphenol	<17		17	5.0	ug/L		05/05/16 08:14	05/13/16 03:06	1
2,4-Dinitrophenol	<17		17	7.3	ug/L		05/05/16 08:14	05/13/16 03:06	1
2,4-Dinitrotoluene	<0.85		0.85	0.21	ug/L		05/05/16 08:14	05/13/16 03:06	1
2,6-Dinitrotoluene	<0.43		0.43	0.063	ug/L		05/05/16 08:14	05/13/16 03:06	1
Di-n-octyl phthalate	<8.5		8.5	0.89	ug/L		05/05/16 08:14	05/13/16 03:06	1
Fluoranthene	<0.85		0.85	0.39	ug/L		05/05/16 08:14	05/13/16 03:06	1
Fluorene	<0.85		0.85	0.21	ug/L		05/05/16 08:14	05/13/16 03:06	1
Hexachlorobenzene	<0.43		0.43	0.067	ug/L		05/05/16 08:14	05/13/16 03:06	1
Hexachlorobutadiene	<4.3		4.3	0.44	ug/L		05/05/16 08:14	05/13/16 03:06	1
Hexachlorocyclopentadiene	<17		17	5.4	ug/L		05/05/16 08:14	05/13/16 03:06	1
Hexachloroethane	<4.3		4.3	0.51	ug/L		05/05/16 08:14	05/13/16 03:06	1
Indeno[1,2,3-cd]pyrene	<0.17		0.17	0.064	ug/L		05/05/16 08:14	05/13/16 03:06	1
Isophorone	<1.7		1.7	0.32	ug/L		05/05/16 08:14	05/13/16 03:06	1
2-Methylnaphthalene	**0.14**	**J**	0.43	0.055	ug/L		05/05/16 08:14	05/13/16 03:06	1

Client Sample ID: MW-8-GW-04292016

Date Collected: 04/29/16 14:02
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-6

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	<1.7		1.7	0.26	ug/L		05/05/16 08:14	05/13/16 03:06	1
3 & 4 Methylphenol	**0.93**	**J**	1.7	0.38	ug/L		05/05/16 08:14	05/13/16 03:06	1
Naphthalene	<0.85		0.85	0.26	ug/L		05/05/16 08:14	05/13/16 03:06	1
2-Nitroaniline	<4.3		4.3	1.1	ug/L		05/05/16 08:14	05/13/16 03:06	1
3-Nitroaniline	<8.5		8.5	1.5	ug/L		05/05/16 08:14	05/13/16 03:06	1
4-Nitroaniline	<8.5		8.5	1.4	ug/L		05/05/16 08:14	05/13/16 03:06	1
Nitrobenzene	<0.85		0.85	0.38	ug/L		05/05/16 08:14	05/13/16 03:06	1
2-Nitrophenol	<8.5		8.5	2.1	ug/L		05/05/16 08:14	05/13/16 03:06	1
4-Nitrophenol	<17		17	6.3	ug/L		05/05/16 08:14	05/13/16 03:06	1
N-Nitrosodi-n-propylamine	<0.43		0.43	0.13	ug/L		05/05/16 08:14	05/13/16 03:06	1
N-Nitrosodiphenylamine	<0.85		0.85	0.31	ug/L		05/05/16 08:14	05/13/16 03:06	1
2,2'-oxybis[1-chloropropane]	<1.7		1.7	0.32	ug/L		05/05/16 08:14	05/13/16 03:06	1
Pentachlorophenol	<17		17	3.3	ug/L		05/05/16 08:14	05/13/16 03:06	1
Phenanthrene	<0.85		0.85	0.26	ug/L		05/05/16 08:14	05/13/16 03:06	1
Phenol	<4.3		4.3	0.57	ug/L		05/05/16 08:14	05/13/16 03:06	1
Pyrene	<0.85		0.85	0.36	ug/L		05/05/16 08:14	05/13/16 03:06	1
2,4,5-Trichlorophenol	<8.5		8.5	2.2	ug/L		05/05/16 08:14	05/13/16 03:06	1
2,4,6-Trichlorophenol	<4.3		4.3	0.61	ug/L		05/05/16 08:14	05/13/16 03:06	1
Benzaldehyde	~~<17~~ *	R	~~17~~	~~13~~	~~ug/L~~		05/05/16 08:14	05/13/16 03:06	1
Caprolactam	<8.5		8.5	1.3	ug/L		05/05/16 08:14	05/13/16 03:06	1
Atrazine	<4.3		4.3	0.53	ug/L		05/05/16 08:14	05/13/16 03:06	1
1,1'-Biphenyl	<4.3		4.3	0.31	ug/L		05/05/16 08:14	05/13/16 03:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*30 - 123*	*05/05/16 08:14*	*05/13/16 03:06*	*1*
2-Fluorophenol (Surr)	*67*		*30 - 110*	*05/05/16 08:14*	*05/13/16 03:06*	*1*
Nitrobenzene-d5 (Surr)	*72*		*33 - 139*	*05/05/16 08:14*	*05/13/16 03:06*	*1*
Phenol-d5 (Surr)	*53*		*20 - 100*	*05/05/16 08:14*	*05/13/16 03:06*	*1*
Terphenyl-d14 (Surr)	*99*		*42 - 150*	*05/05/16 08:14*	*05/13/16 03:06*	*1*
2,4,6-Tribromophenol (Surr)	*89*		*30 - 150*	*05/05/16 08:14*	*05/13/16 03:06*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.042		0.042	0.0055	ug/L		05/02/16 16:20	05/03/16 17:11	1
alpha-BHC	<0.042		0.042	0.0027	ug/L		05/02/16 16:20	05/03/16 17:11	1
alpha-Chlordane	<0.042		0.042	0.0046	ug/L		05/02/16 16:20	05/03/16 17:11	1
beta-BHC	<0.042		0.042	0.011	ug/L		05/02/16 16:20	05/03/16 17:11	1
4,4'-DDD	<0.042		0.042	0.014	ug/L		05/02/16 16:20	05/03/16 17:11	1
4,4'-DDE	<0.042		0.042	0.0040	ug/L		05/02/16 16:20	05/03/16 17:11	1
4,4'-DDT	<0.042		0.042	0.0033	ug/L		05/02/16 16:20	05/03/16 17:11	1
delta-BHC	<0.042		0.042	0.011	ug/L		05/02/16 16:20	05/03/16 17:11	1
Dieldrin	<0.042		0.042	0.013	ug/L		05/02/16 16:20	05/03/16 17:11	1
Endosulfan I	<0.042		0.042	0.0043	ug/L		05/02/16 16:20	05/03/16 17:11	1
Endosulfan II	<0.042		0.042	0.0029	ug/L		05/02/16 16:20	05/03/16 17:11	1
Endosulfan sulfate	<0.042		0.042	0.012	ug/L		05/02/16 16:20	05/03/16 17:11	1
Endrin	<0.042		0.042	0.015	ug/L		05/02/16 16:20	05/03/16 17:11	1
Endrin aldehyde	<0.042		0.042	0.0086	ug/L		05/02/16 16:20	05/03/16 17:11	1
Endrin ketone	<0.042		0.042	0.018	ug/L		05/02/16 16:20	05/03/16 17:11	1
gamma-BHC (Lindane)	<0.042		0.042	0.0058	ug/L		05/02/16 16:20	05/03/16 17:11	1
gamma-Chlordane	<0.042		0.042	0.0075	ug/L		05/02/16 16:20	05/03/16 17:11	1

Client Sample ID: MW-8-GW-04292016

Date Collected: 04/29/16 14:02
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-6

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	<0.042		0.042	0.014	ug/L		05/02/16 16:20	05/03/16 17:11	1
Heptachlor epoxide	<0.042		0.042	0.014	ug/L		05/02/16 16:20	05/03/16 17:11	1
Methoxychlor	<0.083		0.083	0.024	ug/L		05/02/16 16:20	05/03/16 17:11	1
Toxaphene	<0.42		0.42	0.21	ug/L		05/02/16 16:20	05/03/16 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*82*		*30 - 143*	*05/02/16 16:20*	*05/03/16 17:11*	*1*
Tetrachloro-m-xylene	*67*		*30 - 120*	*05/02/16 16:20*	*05/03/16 17:11*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.42		0.42	0.070	ug/L		05/02/16 16:20	05/03/16 18:23	1
PCB-1221	<0.42		0.42	0.21	ug/L		05/02/16 16:20	05/03/16 18:23	1
PCB-1232	<0.42		0.42	0.21	ug/L		05/02/16 16:20	05/03/16 18:23	1
PCB-1242	<0.42		0.42	0.21	ug/L		05/02/16 16:20	05/03/16 18:23	1
PCB-1248	<0.42		0.42	0.21	ug/L		05/02/16 16:20	05/03/16 18:23	1
PCB-1254	<0.42		0.42	0.21	ug/L		05/02/16 16:20	05/03/16 18:23	1
PCB-1260	<0.42		0.42	0.073	ug/L		05/02/16 16:20	05/03/16 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*30 - 127*	*05/02/16 16:20*	*05/03/16 18:23*	*1*
DCB Decachlorobiphenyl	*75*		*30 - 150*	*05/02/16 16:20*	*05/03/16 18:23*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		05/02/16 09:28	05/03/16 19:51	1
Antimony	<0.020		0.020	0.0064	mg/L		05/02/16 09:28	05/03/16 19:51	1
Arsenic	<0.010		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:51	1
Barium	**0.65**		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:51	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		05/02/16 09:28	05/03/16 19:51	1
Cadmium	**0.0014**	J	0.0020	0.00094	mg/L		05/02/16 09:28	05/03/16 19:51	1
Calcium	**110**	J	0.20	0.059	mg/L		05/02/16 09:28	05/03/16 19:51	1
Chromium	<0.010		0.010	0.0024	mg/L		05/02/16 09:28	05/03/16 19:51	1
Cobalt	<0.0050		0.0050	0.00096	mg/L		05/02/16 09:28	05/03/16 19:51	1
Copper	<0.010		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:51	1
Iron	**10**	J	0.20	0.10	mg/L		05/02/16 09:28	05/03/16 19:51	1
Lead	<0.0050		0.0050	0.0024	mg/L		05/02/16 09:28	05/03/16 19:51	1
Magnesium	**91**		0.10	0.034	mg/L		05/02/16 09:28	05/03/16 19:51	1
Manganese	**0.16**		0.010	0.0034	mg/L		05/02/16 09:28	05/03/16 19:51	1
Nickel	<0.010		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:51	1
Potassium	**38**		0.50	0.16	mg/L		05/02/16 09:28	05/03/16 19:51	1
Selenium	<0.010		0.010	0.0046	mg/L		05/02/16 09:28	05/03/16 19:51	1
Silver	<0.0050		0.0050	0.0013	mg/L		05/02/16 09:28	05/03/16 19:51	1
Sodium	**240**		1.0	0.43	mg/L		05/02/16 09:28	05/03/16 19:51	1
Thallium	<0.010		0.010	0.0028	mg/L		05/02/16 09:28	05/03/16 19:51	1
Vanadium	<0.0050		0.0050	0.0019	mg/L		05/02/16 09:28	05/03/16 19:51	1
Zinc	<0.020		0.020	0.0090	mg/L		05/02/16 09:28	05/03/16 19:51	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.20		0.20	0.062	mg/L		05/02/16 09:28	05/03/16 19:57	1

Client Sample ID: MW-8-GW-04292016

Date Collected: 04/29/16 14:02
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-6

Matrix: Water

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.020		0.020	0.0064	mg/L		05/02/16 09:28	05/03/16 19:57	1
Arsenic	<0.010		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:57	1
Barium	**0.63**		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:57	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		05/02/16 09:28	05/03/16 19:57	1
Cadmium	**0.0014**	J	0.0020	0.00094	mg/L		05/02/16 09:28	05/03/16 19:57	1
Calcium	**110**	J	0.20	0.059	mg/L		05/02/16 09:28	05/03/16 19:57	1
Chromium	<0.010		0.010	0.0024	mg/L		05/02/16 09:28	05/03/16 19:57	1
Cobalt	<0.0050		0.0050	0.00096	mg/L		05/02/16 09:28	05/03/16 19:57	1
Copper	<0.010		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 19:57	1
Iron	**10**	J	0.20	0.10	mg/L		05/02/16 09:28	05/03/16 19:57	1
Lead	<0.0050	UJ	0.0050	0.0024	mg/L		05/02/16 09:28	05/03/16 19:57	1
Magnesium	**90**		0.10	0.034	mg/L		05/02/16 09:28	05/03/16 19:57	1
Manganese	**0.16**		0.010	0.0034	mg/L		05/02/16 09:28	05/03/16 19:57	1
Nickel	<0.010		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 19:57	1
Potassium	**37**		0.50	0.16	mg/L		05/02/16 09:28	05/03/16 19:57	1
Selenium	< 0.010 ~~0.0065 J B~~	UB	0.010	0.0046	mg/L		05/02/16 09:28	05/03/16 19:57	1
Silver	<0.0050		0.0050	0.0013	mg/L		05/02/16 09:28	05/03/16 19:57	1
Sodium	**230**		1.0	0.43	mg/L		05/02/16 09:28	05/03/16 19:57	1
Thallium	<0.010		0.010	0.0028	mg/L		05/02/16 09:28	05/03/16 19:57	1
Vanadium	<0.0050		0.0050	0.0019	mg/L		05/02/16 09:28	05/03/16 19:57	1
Zinc	<0.020	UJ	0.020	0.0090	mg/L		05/02/16 09:28	05/03/16 19:57	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/04/16 15:00	05/05/16 11:47	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/04/16 15:00	05/05/16 11:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**0.30**	J	1.0	0.22	mg/L			05/03/16 05:52	1
Sulfate	<5.0		5.0	2.0	mg/L			05/06/16 09:22	1
Total Organic Carbon - Duplicates	**13**		1.0	0.23	mg/L			05/13/16 23:59	1
Nitrogen, Nitrate	<0.10		0.10	0.045	mg/L			05/13/16 15:09	1
Total Suspended Solids	**23**		5.0	1.6	mg/L			05/03/16 11:52	1
Ammonia	**41**	~~B~~	2.0	0.43	mg/L		05/11/16 18:12	05/12/16 19:31	10
Nitrogen, Nitrite	**0.034**		0.020	0.0032	mg/L			04/30/16 12:23	1
Nitrogen, Nitrate Nitrite	<0.10		0.10	0.045	mg/L			05/12/16 09:42	1

Client Sample ID: DUP-2 (04292016)

Date Collected: 04/29/16 00:00
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**30**		5.0	1.7	ug/L			05/12/16 21:52	1
Benzene	**7.0**		0.50	0.15	ug/L			05/12/16 21:52	1
Bromodichloromethane	<1.0		1.0	0.37	ug/L			05/12/16 21:52	1
Bromoform	<1.0	UJ	1.0	0.48	ug/L			05/12/16 21:52	1
Bromomethane	<2.0		2.0	0.80	ug/L			05/12/16 21:52	1
Carbon disulfide	<2.0		2.0	0.45	ug/L			05/12/16 21:52	1
Carbon tetrachloride	<1.0		1.0	0.38	ug/L			05/12/16 21:52	1
Chlorobenzene	<1.0		1.0	0.39	ug/L			05/12/16 21:52	1
Chloroethane	<1.0		1.0	0.51	ug/L			05/12/16 21:52	1
Chloroform	<1.0		1.0	0.37	ug/L			05/12/16 21:52	1
Chloromethane	<1.0		1.0	0.32	ug/L			05/12/16 21:52	1
cis-1,2-Dichloroethene	**4.5**		1.0	0.41	ug/L			05/12/16 21:52	1
cis-1,3-Dichloropropene	<1.0		1.0	0.42	ug/L			05/12/16 21:52	1
Cyclohexane	<1.0		1.0	0.49	ug/L			05/12/16 21:52	1
Dibromochloromethane	<1.0		1.0	0.49	ug/L			05/12/16 21:52	1
1,2-Dibromo-3-Chloropropane	<5.0	UJ	5.0	2.0	ug/L			05/12/16 21:52	1
1,2-Dibromoethane	<1.0		1.0	0.39	ug/L			05/12/16 21:52	1
1,2-Dichlorobenzene	**2.5**		1.0	0.33	ug/L			05/12/16 21:52	1
1,3-Dichlorobenzene	<1.0		1.0	0.40	ug/L			05/12/16 21:52	1
1,4-Dichlorobenzene	**13**		1.0	0.36	ug/L			05/12/16 21:52	1
Dichlorodifluoromethane	<2.0		2.0	0.67	ug/L			05/12/16 21:52	1
1,1-Dichloroethane	<1.0		1.0	0.41	ug/L			05/12/16 21:52	1
1,2-Dichloroethane	**1.4**		1.0	0.39	ug/L			05/12/16 21:52	1
1,1-Dichloroethene	<1.0		1.0	0.39	ug/L			05/12/16 21:52	1
1,2-Dichloropropane	<1.0		1.0	0.43	ug/L			05/12/16 21:52	1
Ethylbenzene	**97**		0.50	0.18	ug/L			05/12/16 21:52	1
2-Hexanone	<5.0	UJ	5.0	1.6	ug/L			05/12/16 21:52	1
Isopropylbenzene	**6.6**		1.0	0.39	ug/L			05/12/16 21:52	1
Methyl acetate	<5.0		5.0	2.0	ug/L			05/12/16 21:52	1
Methylcyclohexane	**1.1**		1.0	0.32	ug/L			05/12/16 21:52	1
Methylene Chloride	<5.0		5.0	1.6	ug/L			05/12/16 21:52	1
Methyl Ethyl Ketone	**13**	J	5.0	2.1	ug/L			05/12/16 21:52	1
methyl isobutyl ketone	**27**	J	5.0	2.2	ug/L			05/12/16 21:52	1
Methyl tert-butyl ether	<1.0		1.0	0.39	ug/L			05/12/16 21:52	1
Styrene	<1.0		1.0	0.39	ug/L			05/12/16 21:52	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.40	ug/L			05/12/16 21:52	1
Tetrachloroethene	<1.0		1.0	0.37	ug/L			05/12/16 21:52	1
Toluene	**150**		0.50	0.15	ug/L			05/12/16 21:52	1
trans-1,2-Dichloroethene	<1.0		1.0	0.35	ug/L			05/12/16 21:52	1
trans-1,3-Dichloropropene	<1.0		1.0	0.36	ug/L			05/12/16 21:52	1
1,2,4-Trichlorobenzene	<1.0		1.0	0.34	ug/L			05/12/16 21:52	1
1,1,1-Trichloroethane	<1.0		1.0	0.38	ug/L			05/12/16 21:52	1
1,1,2-Trichloroethane	<1.0		1.0	0.35	ug/L			05/12/16 21:52	1
Trichloroethene	<0.50		0.50	0.16	ug/L			05/12/16 21:52	1
Trichlorofluoromethane	<1.0		1.0	0.43	ug/L			05/12/16 21:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0	0.46	ug/L			05/12/16 21:52	1
Vinyl chloride	**3.7**		0.50	0.20	ug/L			05/12/16 21:52	1

Client Sample ID: DUP-2 (04292016)

Date Collected: 04/29/16 00:00
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-7

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*71 - 120*		*05/12/16 21:52*	*1*
Dibromofluoromethane	*96*		*70 - 120*		*05/12/16 21:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*71 - 127*		*05/12/16 21:52*	*1*
Toluene-d8 (Surr)	*100*		*75 - 120*		*05/12/16 21:52*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	**440**	D	5.0	1.1	ug/L			05/12/16 22:18	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*71 - 120*		*05/12/16 22:18*	*5*
Dibromofluoromethane	*99*		*70 - 120*		*05/12/16 22:18*	*5*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 127*		*05/12/16 22:18*	*5*
Toluene-d8 (Surr)	*100*		*75 - 120*		*05/12/16 22:18*	*5*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<8.4		8.4	2.6	ug/L		05/05/16 08:14	05/13/16 10:21	10
Acenaphthylene	<8.4		8.4	2.3	ug/L		05/05/16 08:14	05/13/16 10:21	10
Acetophenone	<42		42	5.6	ug/L		05/05/16 08:14	05/13/16 10:21	10
Anthracene	<8.4		8.4	2.8	ug/L		05/05/16 08:14	05/13/16 10:21	10
Benzo[a]anthracene	<1.7		1.7	0.48	ug/L		05/05/16 08:14	05/13/16 10:21	10
Benzo[a]pyrene	<1.7		1.7	0.83	ug/L		05/05/16 08:14	05/13/16 10:21	10
Benzo[b]fluoranthene	<1.7		1.7	0.68	ug/L		05/05/16 08:14	05/13/16 10:21	10
Benzo[g,h,i]perylene	<8.4		8.4	3.2	ug/L		05/05/16 08:14	05/13/16 10:21	10
Benzo[k]fluoranthene	<1.7		1.7	0.54	ug/L		05/05/16 08:14	05/13/16 10:21	10
Bis(2-chloroethoxy)methane	<17		17	2.4	ug/L		05/05/16 08:14	05/13/16 10:21	10
Bis(2-chloroethyl)ether	<17		17	2.5	ug/L		05/05/16 08:14	05/13/16 10:21	10
Bis(2-ethylhexyl) phthalate	**88**	D	84	14	ug/L		05/05/16 08:14	05/13/16 10:21	10
4-Bromophenyl phenyl ether	<42		42	4.6	ug/L		05/05/16 08:14	05/13/16 10:21	10
Butyl benzyl phthalate	<17		17	4.1	ug/L		05/05/16 08:14	05/13/16 10:21	10
Carbazole	<42		42	3.0	ug/L		05/05/16 08:14	05/13/16 10:21	10
4-Chloroaniline	<84	UJ	84	17	ug/L		05/05/16 08:14	05/13/16 10:21	10
4-Chloro-3-methylphenol	<84		84	19	ug/L		05/05/16 08:14	05/13/16 10:21	10
2-Chloronaphthalene	<17		17	2.0	ug/L		05/05/16 08:14	05/13/16 10:21	10
2-Chlorophenol	<42		42	4.7	ug/L		05/05/16 08:14	05/13/16 10:21	10
4-Chlorophenyl phenyl ether	<42		42	5.4	ug/L		05/05/16 08:14	05/13/16 10:21	10
Chrysene	<4.2		4.2	0.58	ug/L		05/05/16 08:14	05/13/16 10:21	10
Dibenz(a,h)anthracene	<2.5		2.5	0.43	ug/L		05/05/16 08:14	05/13/16 10:21	10
Dibenzofuran	<17		17	2.2	ug/L		05/05/16 08:14	05/13/16 10:21	10
3,3'-Dichlorobenzidine	<42		42	14	ug/L		05/05/16 08:14	05/13/16 10:21	10
2,4-Dichlorophenol	<84		84	22	ug/L		05/05/16 08:14	05/13/16 10:21	10
Diethyl phthalate	<17		17	3.0	ug/L		05/05/16 08:14	05/13/16 10:21	10
2,4-Dimethylphenol	**110**	JD	84	15	ug/L		05/05/16 08:14	05/13/16 10:21	10
Dimethyl phthalate	<17		17	2.6	ug/L		05/05/16 08:14	05/13/16 10:21	10
Di-n-butyl phthalate	<42		42	6.2	ug/L		05/05/16 08:14	05/13/16 10:21	10
4,6-Dinitro-2-methylphenol	<170		170	50	ug/L		05/05/16 08:14	05/13/16 10:21	10
2,4-Dinitrophenol	<170		170	72	ug/L		05/05/16 08:14	05/13/16 10:21	10
2,4-Dinitrotoluene	<8.4		8.4	2.1	ug/L		05/05/16 08:14	05/13/16 10:21	10
2,6-Dinitrotoluene	<4.2		4.2	0.62	ug/L		05/05/16 08:14	05/13/16 10:21	10
Di-n-octyl phthalate	<84		84	8.9	ug/L		05/05/16 08:14	05/13/16 10:21	10

Client Sample ID: DUP-2 (04292016)

Date Collected: 04/29/16 00:00
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-7

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<8.4		8.4	3.8	ug/L		05/05/16 08:14	05/13/16 10:21	10
Fluorene	<8.4		8.4	2.1	ug/L		05/05/16 08:14	05/13/16 10:21	10
Hexachlorobenzene	<4.2		4.2	0.67	ug/L		05/05/16 08:14	05/13/16 10:21	10
Hexachlorobutadiene	<42		42	4.3	ug/L		05/05/16 08:14	05/13/16 10:21	10
Hexachlorocyclopentadiene	<170		170	54	ug/L		05/05/16 08:14	05/13/16 10:21	10
Hexachloroethane	<42		42	5.1	ug/L		05/05/16 08:14	05/13/16 10:21	10
Indeno[1,2,3-cd]pyrene	<1.7		1.7	0.63	ug/L		05/05/16 08:14	05/13/16 10:21	10
Isophorone	<17		17	3.2	ug/L		05/05/16 08:14	05/13/16 10:21	10
2-Methylnaphthalene	**6.6**	D	4.2	0.55	ug/L		05/05/16 08:14	05/13/16 10:21	10
2-Methylphenol	**19**	D	17	2.6	ug/L		05/05/16 08:14	05/13/16 10:21	10
3 & 4 Methylphenol	**90**	D	17	3.8	ug/L		05/05/16 08:14	05/13/16 10:21	10
Naphthalene	**16**	D	8.4	2.6	ug/L		05/05/16 08:14	05/13/16 10:21	10
2-Nitroaniline	<42		42	11	ug/L		05/05/16 08:14	05/13/16 10:21	10
3-Nitroaniline	<84		84	15	ug/L		05/05/16 08:14	05/13/16 10:21	10
4-Nitroaniline	<84		84	14	ug/L		05/05/16 08:14	05/13/16 10:21	10
Nitrobenzene	<8.4		8.4	3.8	ug/L		05/05/16 08:14	05/13/16 10:21	10
2-Nitrophenol	<84		84	21	ug/L		05/05/16 08:14	05/13/16 10:21	10
4-Nitrophenol	<170		170	63	ug/L		05/05/16 08:14	05/13/16 10:21	10
N-Nitrosodi-n-propylamine	<4.2		4.2	1.3	ug/L		05/05/16 08:14	05/13/16 10:21	10
N-Nitrosodiphenylamine	<8.4		8.4	3.1	ug/L		05/05/16 08:14	05/13/16 10:21	10
2,2'-oxybis[1-chloropropane]	<17		17	3.2	ug/L		05/05/16 08:14	05/13/16 10:21	10
Pentachlorophenol	<170		170	33	ug/L		05/05/16 08:14	05/13/16 10:21	10
Phenanthrene	<8.4		8.4	2.5	ug/L		05/05/16 08:14	05/13/16 10:21	10
Phenol	**38**	J D	42	5.7	ug/L		05/05/16 08:14	05/13/16 10:21	10
Pyrene	<8.4		8.4	3.6	ug/L		05/05/16 08:14	05/13/16 10:21	10
2,4,5-Trichlorophenol	<84		84	22	ug/L		05/05/16 08:14	05/13/16 10:21	10
2,4,6-Trichlorophenol	<42		42	6.0	ug/L		05/05/16 08:14	05/13/16 10:21	10
Benzaldehyde	~~<170~~ *	R	~~170~~	~~130~~	~~ug/L~~		05/05/16 08:14	05/13/16 10:21	10
Caprolactam	<84		84	13	ug/L		05/05/16 08:14	05/13/16 10:21	10
Atrazine	<42		42	5.3	ug/L		05/05/16 08:14	05/13/16 10:21	10
1,1'-Biphenyl	<42		42	3.1	ug/L		05/05/16 08:14	05/13/16 10:21	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*99*		*30 - 123*	*05/05/16 08:14*	*05/13/16 10:21*	*10*
2-Fluorophenol (Surr)	*67*		*30 - 110*	*05/05/16 08:14*	*05/13/16 10:21*	*10*
Nitrobenzene-d5 (Surr)	*88*		*33 - 139*	*05/05/16 08:14*	*05/13/16 10:21*	*10*
Phenol-d5 (Surr)	*60*		*20 - 100*	*05/05/16 08:14*	*05/13/16 10:21*	*10*
Terphenyl-d14 (Surr)	*113*		*42 - 150*	*05/05/16 08:14*	*05/13/16 10:21*	*10*
2,4,6-Tribromophenol (Surr)	*111*		*30 - 150*	*05/05/16 08:14*	*05/13/16 10:21*	*10*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.043		0.043	0.0058	ug/L		05/02/16 16:20	05/03/16 17:30	1
alpha-BHC	<0.043		0.043	0.0028	ug/L		05/02/16 16:20	05/03/16 17:30	1
alpha-Chlordane	<0.043		0.043	0.0048	ug/L		05/02/16 16:20	05/03/16 17:30	1
beta-BHC	<0.043		0.043	0.011	ug/L		05/02/16 16:20	05/03/16 17:30	1
4,4'-DDD	<0.043		0.043	0.014	ug/L		05/02/16 16:20	05/03/16 17:30	1
4,4'-DDE	<0.043		0.043	0.0041	ug/L		05/02/16 16:20	05/03/16 17:30	1
4,4'-DDT	<0.043		0.043	0.0035	ug/L		05/02/16 16:20	05/03/16 17:30	1
delta-BHC	<0.043		0.043	0.011	ug/L		05/02/16 16:20	05/03/16 17:30	1

Client Sample ID: DUP-2 (04292016)

Date Collected: 04/29/16 00:00
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-7

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	<0.043		0.043	0.014	ug/L		05/02/16 16:20	05/03/16 17:30	1
Endosulfan I	<0.043		0.043	0.0045	ug/L		05/02/16 16:20	05/03/16 17:30	1
Endosulfan II	<0.043		0.043	0.0030	ug/L		05/02/16 16:20	05/03/16 17:30	1
Endosulfan sulfate	<0.043		0.043	0.013	ug/L		05/02/16 16:20	05/03/16 17:30	1
Endrin	<0.043		0.043	0.015	ug/L		05/02/16 16:20	05/03/16 17:30	1
Endrin aldehyde	<0.043		0.043	0.0089	ug/L		05/02/16 16:20	05/03/16 17:30	1
Endrin ketone	<0.043		0.043	0.018	ug/L		05/02/16 16:20	05/03/16 17:30	1
gamma-BHC (Lindane)	<0.043		0.043	0.0061	ug/L		05/02/16 16:20	05/03/16 17:30	1
gamma-Chlordane	<0.043		0.043	0.0078	ug/L		05/02/16 16:20	05/03/16 17:30	1
Heptachlor	<0.043		0.043	0.015	ug/L		05/02/16 16:20	05/03/16 17:30	1
Heptachlor epoxide	<0.043		0.043	0.015	ug/L		05/02/16 16:20	05/03/16 17:30	1
Methoxychlor	<0.087		0.087	0.025	ug/L		05/02/16 16:20	05/03/16 17:30	1
Toxaphene	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*35*		*30 - 143*	*05/02/16 16:20*	*05/03/16 17:30*	*1*
Tetrachloro-m-xylene	*88*		*30 - 120*	*05/02/16 16:20*	*05/03/16 17:30*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.43		0.43	0.073	ug/L		05/02/16 16:20	05/03/16 18:39	1
PCB-1016	<0.43		0.43	0.073	ug/L		05/02/16 16:20	05/03/16 18:39	1
PCB-1221	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 18:39	1
PCB-1221	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 18:39	1
PCB-1232	~~5.7~~		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 18:39	1
PCB-1232	**4.0**		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 18:39	1
PCB-1242	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 18:39	1
PCB-1242	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 18:39	1
PCB-1248	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 18:39	1
PCB-1248	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 18:39	1
PCB-1254	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 18:39	1
PCB-1254	<0.43		0.43	0.22	ug/L		05/02/16 16:20	05/03/16 18:39	1
PCB-1260	<0.43		0.43	0.076	ug/L		05/02/16 16:20	05/03/16 18:39	1
PCB-1260	<0.43		0.43	0.076	ug/L		05/02/16 16:20	05/03/16 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*46*		*30 - 127*	*05/02/16 16:20*	*05/03/16 18:39*	*1*
Tetrachloro-m-xylene	*33*		*30 - 127*	*05/02/16 16:20*	*05/03/16 18:39*	*1*
DCB Decachlorobiphenyl	*24*	*X*	*30 - 150*	*05/02/16 16:20*	*05/03/16 18:39*	*1*
DCB Decachlorobiphenyl	*30*		*30 - 150*	*05/02/16 16:20*	*05/03/16 18:39*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.51**		0.20	0.062	mg/L		05/02/16 09:28	05/03/16 20:02	1
Antimony	<0.020		0.020	0.0064	mg/L		05/02/16 09:28	05/03/16 20:02	1
Arsenic	**0.023**		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 20:02	1
Barium	**0.31**		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 20:02	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		05/02/16 09:28	05/03/16 20:02	1
Cadmium	**0.0022**		0.0020	0.00094	mg/L		05/02/16 09:28	05/03/16 20:02	1
Calcium	**28**	J	0.20	0.059	mg/L		05/02/16 09:28	05/03/16 20:02	1

Client Sample ID: DUP-2 (04292016)

Date Collected: 04/29/16 00:00
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-7

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.14		0.010	0.0024	mg/L		05/02/16 09:28	05/03/16 20:02	1
Cobalt	0.036		0.0050	0.00096	mg/L		05/02/16 09:28	05/03/16 20:02	1
Copper	0.013		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 20:02	1
Iron	2.2	J	0.20	0.10	mg/L		05/02/16 09:28	05/03/16 20:02	1
Lead	0.13		0.0050	0.0024	mg/L		05/02/16 09:28	05/03/16 20:02	1
Magnesium	29		0.10	0.034	mg/L		05/02/16 09:28	05/03/16 20:02	1
Manganese	0.0093	J	0.010	0.0034	mg/L		05/02/16 09:28	05/03/16 20:02	1
Nickel	0.14		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 20:02	1
Potassium	610		0.50	0.16	mg/L		05/02/16 09:28	05/03/16 20:02	1
Selenium	< 0.010 ~~0.0093~~	~~J B~~ UB	0.010	0.0046	mg/L		05/02/16 09:28	05/03/16 20:02	1
Silver	<0.0050		0.0050	0.0013	mg/L		05/02/16 09:28	05/03/16 20:02	1
Sodium	3300		100	43	mg/L		05/02/16 09:28	05/05/16 15:59	100
Thallium	<0.010		0.010	0.0028	mg/L		05/02/16 09:28	05/03/16 20:02	1
Vanadium	0.057		0.0050	0.0019	mg/L		05/02/16 09:28	05/03/16 20:02	1
Zinc	0.18		0.020	0.0090	mg/L		05/02/16 09:28	05/03/16 20:02	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.27		0.20	0.062	mg/L		05/02/16 09:28	05/03/16 20:07	1
Antimony	<0.020		0.020	0.0064	mg/L		05/02/16 09:28	05/03/16 20:07	1
Arsenic	0.021		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 20:07	1
Barium	0.29		0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 20:07	1
Beryllium	<0.0040		0.0040	0.00085	mg/L		05/02/16 09:28	05/03/16 20:07	1
Cadmium	0.0014	J	0.0020	0.00094	mg/L		05/02/16 09:28	05/03/16 20:07	1
Calcium	26	J	0.20	0.059	mg/L		05/02/16 09:28	05/03/16 20:07	1
Chromium	0.13		0.010	0.0024	mg/L		05/02/16 09:28	05/03/16 20:07	1
Cobalt	0.034		0.0050	0.00096	mg/L		05/02/16 09:28	05/03/16 20:07	1
Copper	0.0048	J	0.010	0.0022	mg/L		05/02/16 09:28	05/03/16 20:07	1
Iron	2.0	J	0.20	0.10	mg/L		05/02/16 09:28	05/03/16 20:07	1
Lead	0.032	J	0.0050	0.0024	mg/L		05/02/16 09:28	05/03/16 20:07	1
Magnesium	28		0.10	0.034	mg/L		05/02/16 09:28	05/03/16 20:07	1
Manganese	0.0084	J	0.010	0.0034	mg/L		05/02/16 09:28	05/03/16 20:07	1
Nickel	0.14		0.010	0.0031	mg/L		05/02/16 09:28	05/03/16 20:07	1
Potassium	590		0.50	0.16	mg/L		05/02/16 09:28	05/03/16 20:07	1
Selenium	< 0.010 ~~0.0078~~	~~J B~~ UB	0.010	0.0046	mg/L		05/02/16 09:28	05/03/16 20:07	1
Silver	<0.0050		0.0050	0.0013	mg/L		05/02/16 09:28	05/03/16 20:07	1
Sodium	3200		100	43	mg/L		05/02/16 09:28	05/05/16 16:03	100
Thallium	<0.010		0.010	0.0028	mg/L		05/02/16 09:28	05/03/16 20:07	1
Vanadium	0.050		0.0050	0.0019	mg/L		05/02/16 09:28	05/03/16 20:07	1
Zinc	0.060	J	0.020	0.0090	mg/L		05/02/16 09:28	05/03/16 20:07	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020		0.00020	0.00011	mg/L		05/04/16 15:00	05/05/16 11:50	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00011	mg/L		05/04/16 15:00	05/05/16 11:52	1

Client Sample ID: DUP-2 (04292016)

Date Collected: 04/29/16 00:00
Date Received: 04/30/16 07:34

Lab Sample ID: 500-110948-7

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**4.5**	J	1.0	0.22	mg/L			05/03/16 05:55	1
Sulfate	**63**		20	8.0	mg/L			05/06/16 09:06	4
Total Organic Carbon - Duplicates	**350**		20	4.6	mg/L			05/14/16 00:19	20
Nitrogen, Nitrate	<0.10		0.10	0.045	mg/L			05/13/16 15:09	1
Total Suspended Solids	**19**		5.0	1.6	mg/L			05/03/16 11:53	1
Ammonia	**770**	~~B~~	40	8.6	mg/L		05/11/16 18:12	05/12/16 20:17	200
Nitrogen, Nitrite	<0.020		0.020	0.0032	mg/L			04/30/16 12:23	1
Nitrogen, Nitrate Nitrite	<0.20		0.20	0.090	mg/L			05/12/16 09:44	2